

Coal Industry Annual 1998

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Preface

Coal Industry Annual 1998 provides comprehensive information about U.S. coal production, number of mines, prices, productivity, employment, productive capacity, and recoverable reserves. U.S. coal production for 1998 is based on the U.S. Department of Labor's Mine Safety and Health Administration's Form 7000-2, "Quarterly Mine Employment and Coal Production Report." Coal production for 1997 and previous years is based on the annual survey EIA-7A, "Coal Production Report."

This report also presents data on coal consumption, coal distribution, coal stocks, coal prices, and coal quality. Appendix A contains a compilation of coal statistics for the major coal-producing States. This report includes national total coal consumption for nonutility power producers that are not in the manufacturing, agriculture, mining, construction, or commercial sectors.

The base year for the implicit price deflator, which is used to convert nominal figures to real figures is 1992, the same as the previous year (Table D2).

This report constitutes the 23rd annual report on coal production published by EIA and continues the series

formerly included in the *Minerals Yearbook* published by the Bureau of Mines.

The data presented in the report were collected and published by the Energy Information Administration (EIA), to fulfill its data collection and dissemination responsibilities, as specified in the Federal Energy Administration Act of 1974 (Public Law 93-275), as amended. Data for the Demonstrated Reserve Base (DRB) are now reported in *U.S. Coal Reserves: A Review and Update* (DOE/EIA-0529). However, this report presents data on the recoverable portion of the DRB in Table 105.

The Office of Coal, Nuclear, Electric and Alternate Fuels gratefully acknowledges the cooperation of the respondents in supplying the information presented in this report and appreciates the valuable assistance of State coal mining agencies; the U.S. Department of the Interior: the Bureau of Land Management, the Minerals Management Service; the U.S. Department of Labor: the Mine Safety and Health Administration, the Bureau of Labor Statistics; the U.S. Department of Commerce: the Bureau of the Census; and the King Publishing Corporation.

Notice

The Energy Information Administration (EIA) changed the survey form EIA-7A "Coal Production Report," beginning with the collection of 1998 data. Data on coal production and employment are no longer collected on the Form EIA-7A; rather those data are obtained through a data-sharing agreement with the Mine Safety and Health Administration (MSHA) of the U.S. Department of Labor, based on the Form 7000-2, "Quarterly Mine Employment and Coal Production Report." As a result of these changes, certain data elements are no longer consistent with the historical data series.

Some differences in the 1998 data are attributable to modifications of definitions, while other differences are a result of changes in the industry. It is important to note these changes when comparing data over the historical period.

The changes are specified in the following text.

The data on 1998 coal production at the county level are no longer comparable with data published in previous issues of the *Coal Industry Annual*. Production

at the county level is now solely based on the county in which the mine originally opened, whether or not any coal was produced in that county. (Adjustments have been made only for mines that cross State boundaries.) As a consequence, the number of mines is also no longer comparable with the historical series, since a mine that had previously crossed county lines, was counted as two mines.

The data on 1998 productivity are not comparable with the historic data series, since the MSHA definition of employment differs from that previously used by EIA. EIA had defined employment to include all managerial, technical, and engineering personnel, whether or not they worked in the mine. MSHA defines employment as the personnel working in the mine. MSHA has a separate category for the office employees.

The definition of the producer's price of coal has changed for 1998. Previously, EIA defined price data as f.o.b. (free on board) mine price; producer's price is now defined as f.o.b. (free on board) rail/barge.

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Executive Summary

Overview

Responding to increased coal demand in the electric power industry, U.S. coal production rose to a record high of 1,117.5 million short tons in 1998, a 2.5-percent increase from the 1997 production level (Table ES1). The electric power industry (utilities and independent power producers)—the dominant coal consumer—used a record 937.8 million short tons, 1.7 percent higher than in 1997. The increase in coal use for electricity generation was attributable primarily to a decline in hydroelectric generation. Growth in electricity demand was also a contributing factor. Coal consumption in the non-electricity sectors (residential/commercial and industrial users) declined by 5.7 percent to 101.6 million short tons.

In 1998, U.S. coal imports rose substantially, by 16.5 percent to 8.7 million short tons, while coal exports dropped by 5.5 million short tons to 78.0 million short tons, continuing the downward trend of the previous year. The decline in 1998 was mostly in metallurgical coal exports, unlike the previous year when lower steam coal exports were responsible for the overall decline in coal exports.

The trend toward reduced levels of consumer coal stocks (in terms of both absolute tonnage and days of supply) was reversed in 1998, with year-end stocks rising to 128.1 million short tons, an increase of 21.2 million short tons from the 1997 level. To some extent, mild fall and winter weather over much of the country moderated the amount of coal burned at electric utilities and pushed up year-end coal stock levels. Even in regions with cold weather, severe storms resulted in some widespread power outages, curtailing coal use. Year-end stocks at electric utilities rose by 21.7 million short tons. Stocks held by producers and distributors also rose to 36.5 million short tons in 1998.

Despite the increase in domestic coal demand in 1998, the price of coal continued the downward trend that started more than a decade ago. On a delivered basis, the average utility coal price (per ton) dropped by 2.0 percent, the price of industrial coal declined marginally, and the price of coal for coke plants fell by about 3.3 percent. The average price of U.S. coal exports,

measured in free alongside ship (f.a.s.) value, fell by 4.1 percent, while the price of U.S. coal imports fell by 6.2 percent in 1998.

Production

The U.S. coal industry produced 1,117.5 million short tons in 1998, 27.6 million short tons more than the 1997 production level (Table ES2). The increase was confined exclusively to the Western Region, where coal output rose by 8.3 percent. As a result, the Western Region for the first time surpassed Appalachia as the leading coal-producing region in the United States (Figure ES1). Coal production in the Appalachian and Interior Regions declined in 1998 (Figure ES2).

Demand for western low-sulfur coal, spurred by its low cost and the sulfur emissions reduction requirements of the 1990 Clean Air Act Amendments (CAAA), resumed its rapid growth in 1998 after weak performances in 1996 and 1997. Demand for western coal was also buttressed by a large drop in hydroelectric generation in 1998 in regions west of the Mississippi. By contrast, mild weather and the return to operation of significant amounts of nuclear-powered capacity stifled growth in coal demand for both the Appalachian and Interior Regions.

Appalachian Region

Coal production in the Appalachian Region fell by 1.6 percent from its 1997 level to 460.4 million short tons in 1998. Although utility coal consumption in many of the Appalachian coal markets, such as the South Atlantic, Middle Atlantic, and East North Central Census Divisions (Figure ES3), increased in 1998, offsetting reduction in metallurgical coal exports and coal consumption at coke plants (traditional markets for Appalachian coal) led to a decline in overall Appalachian coal production.

Pennsylvania was the only State in the region with an increase in coal production in 1998. Pennsylvania coal production reached 81.0 million short tons, a level not seen since 1981. Pennsylvania's producers supplied a large portion of the increased coal needs of Ontario

Table ES1. U.S. Coal Supply, Disposition, and Prices, 1995-1998
(Million Short Tons and Nominal Dollars per Short Ton)

Item	1995	1996	1997	1998
Production by Region				
Appalachian	434.9	451.9	467.8	460.4
Interior	168.5	172.8	170.9	168.4
Western	429.6	439.1	451.3	488.8
Total	1,033.0	1,063.9	1,089.9	1,117.5
Consumption by Sector				
Electricity	849.8	896.9	922.0	937.8
Utilities	829.0	874.7	900.4	910.9
Independent Power Producers	20.8	22.2	21.6	^a 26.9
Coke Plants	33.0	31.7	30.2	28.2
Other Industrial Plants	73.1	70.9	70.6	68.1
Residential/Commercial Users	5.8	6.0	6.5	4.9
Total	961.7	1,005.6	1,029.2	1,039.0
Year-End Coal Stocks				
Electric Utilities	126.3	114.6	98.8	120.5
Coke Plants	2.6	2.7	2.0	2.0
Other Industrial Plants	5.7	5.7	5.6	5.5
Producers/Distributors	34.4	28.6	34.0	36.5
Total	169.1	151.6	140.4	164.5
U.S. Coal Trade				
Exports	88.5	90.5	83.5	78.0
Steam Coal	36.5	37.5	31.4	31.0
Metallurgical Coal	52.1	53.0	52.2	47.1
Imports	7.2	7.1	7.5	8.7
Net Exports	81.3	83.3	76.1	69.3
Average Delivered Price				
Electric Utilities	27.01	26.45	26.16	25.64
Coke Plants	47.34	47.33	47.61	46.06
Other Industrial Plants	32.42	32.32	32.41	32.30
Average Free Alongside Ship (f.a.s.) Price				
Exports	40.27	40.76	40.55	38.89
Steam Coal	34.51	34.09	32.42	30.24
Metallurgical Coal	44.30	45.49	45.45	44.58
Imports	34.13	33.45	34.32	32.18

^aIncludes an estimated 5.5 million short tons consumed by 10 coal-fired power plants sold to nonutilities during the year.

Notes: Totals may not equal sum of components due to independent rounding. Sum of net exports, stock changes, and consumption may not equal production, primarily because the supply and disposition data are obtained from different surveys.

Sources: **Production, consumption, stocks, and prices:** Energy Information Administration, *Quarterly Coal Report, October-December 1998*, DOE/EIA-0121(98/4Q) (Washington, DC, July 1999); *Coal Industry Annual 1997*, DOE/EIA-0584(97) (Washington, DC, December 1998); *Electric Power Monthly, March 1999*, DOE/EIA-0226(99/03) (Washington, DC, March 1999); and Federal Energy Regulatory Commission Form 423, "Cost and Quality of Fuels for Electric Utilities." **Exports and imports:** U.S. Department of Commerce, Bureau of the Census, "Monthly Report EM 545" and "Monthly Report IM 145."

Hydro in 1998. With declines in metallurgical coal exports and coal consumption at coke plants, West Virginia—the largest coal-producing State in the region—showed a coal production decrease of 2.6 million short tons (1.5 percent) in 1998, and coal production in Eastern Kentucky fell by 4.3 million short tons (3.5 percent), offsetting the gains of the previous year.

Interior Region

Overall coal production in the Interior Region decreased by 2.5 million short tons in 1998 to a total of 168.4 million short tons, about the same as the 1995 level. Production in the Illinois Basin (Illinois, Indiana, and Western Kentucky) accounted for more than half the

Table ES2. U.S. Coal Production by Coal-Producing Region and State, 1995-1998
(Million Short Tons)

Coal-Producing Region and State	1995	1996	1997	1998
Appalachian Total	434.9	451.9	467.8	460.4
Alabama	24.6	24.6	24.5	23.0
Kentucky, Eastern	118.5	117.0	120.9	116.7
Maryland	3.7	4.1	4.2	4.0
Ohio	26.1	28.6	29.2	28.0
Pennsylvania Total	61.6	67.9	76.2	81.0
Anthracite	4.7	4.8	4.7	5.2
Bituminous	56.9	63.2	71.5	75.8
Tennessee	3.2	3.7	3.3	2.7
Virginia	34.1	35.6	35.8	33.7
West Virginia	163.0	170.4	173.7	171.2
Northern	46.1	45.9	42.8	44.7
Southern	116.9	124.5	130.9	126.5
Interior Total	168.5	172.8	170.9	168.4
Arkansas	*	*	*	*
Illinois	48.2	46.7	41.2	39.7
Indiana	26.0	29.7	35.5	36.8
Kansas	0.3	0.2	0.4	0.3
Kentucky, Western	35.2	35.5	34.9	33.6
Louisiana	3.7	3.2	3.5	3.2
Missouri	0.5	0.7	0.4	0.4
Oklahoma	1.9	1.7	1.6	1.7
Texas	52.7	55.2	53.3	52.6
Western Total	429.6	439.1	451.3	488.8
Alaska	1.7	1.5	1.5	1.3
Arizona	11.9	10.4	11.7	11.3
Colorado	25.7	24.9	27.4	29.6
Montana	39.5	37.9	41.0	42.8
New Mexico	26.8	24.1	27.0	28.6
North Dakota	30.1	29.9	29.6	29.9
Utah	25.2	27.5	26.7	26.1
Washington	4.9	4.6	4.5	4.6
Wyoming	263.8	278.4	281.9	314.4
U.S. Total	1,033.0	1,063.9	1,089.9	1,117.5

* = Less than 50,000 short tons.

Notes: Totals may not equal sum of components due to independent rounding.

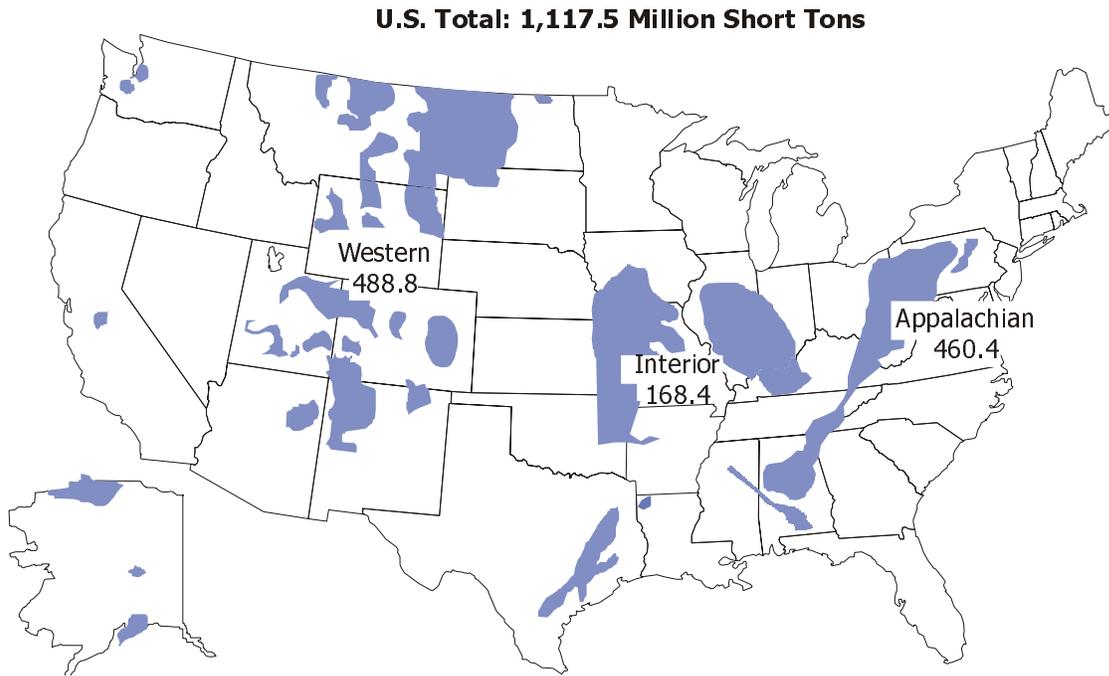
Source: Energy Information Administration, *Coal Industry Annual 1997*, DOE/EIA-0584(97) (Washington, DC, December 1998); and *Quarterly Coal Report, October-December 1998*, DOE/EIA-0121(98/4Q)(Washington, DC, July 1999).

loss, falling from 111.6 million short tons in 1997 to 110.2 million short tons in 1998. Indiana's coal production rose by 1.3 million short tons, while Western Kentucky's coal output declined by 1.3 million short tons. Production in Illinois continued its decline of the past several years, down by 1.4 million short tons to 39.7 million short tons in 1998.

Competition from low-cost gas-fired electricity generation had an adverse effect on lignite production in Texas, which was 0.7 million short tons lower than in 1997.

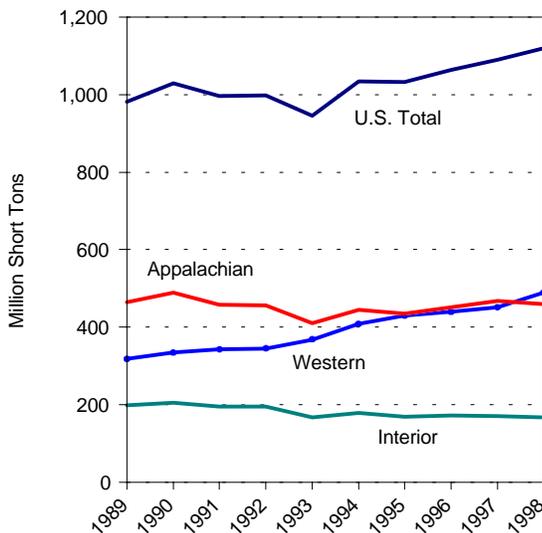
Taking advantage of the low natural gas prices in 1998, electric utilities in Texas increased gas-fired generation by 17.7 percent while reducing overall coal-based generation by 2.3 percent.

Figure ES1. Coal Production by Coal-Producing Region, 1998
(Million Short Tons)



Source: Energy Information Administration.

Figure ES2. Coal Production by Region, 1989-1998



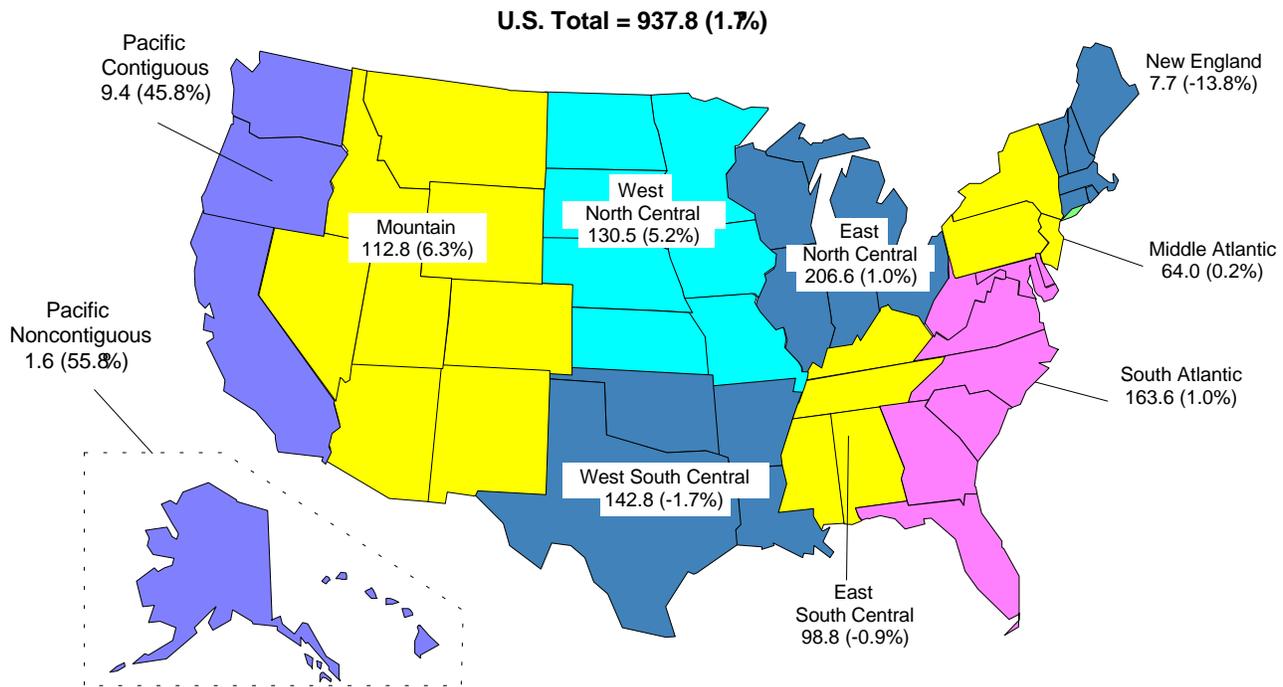
Sources: Energy Information Administration, *Quarterly Coal Report, October-December 1998*, DOE/EIA-0121(98/4Q) (Washington, DC, July 1999); *Coal Production*, DOE/EIA-0118, various issues; and *Coal Industry Annual 1997*, DOE/EIA-0584(97) (Washington, DC, December 1998).

Western Region

In 1998, the Western Region overtook Appalachia as the largest coal-producing region in the United States with 488.8 million short tons produced, up by 8.3 percent over 1997. Growth in coal production in the Western Region was dominated by the low-sulfur Powder River Basin coal fields. Utilities in the midwestern States continued switching to the low-sulfur coals from the Powder River Basin in preparation for the more stringent Phase 2 emission reduction requirements of the CAAA, which go into effect in 2000. Large declines in hydroelectric generation in the Pacific Contiguous and Mountain Census Divisions also raised utility coal consumption in the West. In addition, the coal transportation problems experienced in 1997 by the Union Pacific Railroad were remedied for the most part in 1998, satisfying pent-up utility coal demand. These factors helped boost coal output to record levels in four coal-producing States in the region.

Coal production in Wyoming, by far the largest coal-producing State in the country, rose by 32.5 million short tons (11.5 percent) in 1998. The increase brought

Figure ES3. Electric Power Industry Consumption of Coal by Census Division, 1998
(Million Short Tons and Percent Change from 1997)



Source: Energy Information Administration, *Electric Power Monthly*, March 1999, DOE/EIA-0226(99/03) (Washington, DC, March 1999); Form EIA-867, "Annual Nonutility Power Producers Report," and 1998 estimates for 10 coal-fired power plants sold to nonutility power producers during the year.

Wyoming's production to 314.4 million short tons, 28 percent of the U.S. total and only slightly less than the combined total of the next two largest coal-producing States of West Virginia and Kentucky. Increased shipments to electric utilities in midwestern and eastern States helped push Wyoming's production to a record level.

With strong utility demand in the Mountain Census Division, coal production rose to record highs in 1998 in Colorado (29.6 million short tons, up by 7.9 percent from 1997), Montana (42.8 million short tons, up by 4.5 percent), and New Mexico (28.6 million short tons, up by 5.8 percent).

Not all States shared in the Western Region's production growth, however. Utah registered a decrease of 0.6 million short tons in 1998, hampered in part by export demand in Asia. Arizona's coal output declined by 0.4 million short tons in 1998, and Alaska's output dropped by 0.1 million short tons.

Consumption

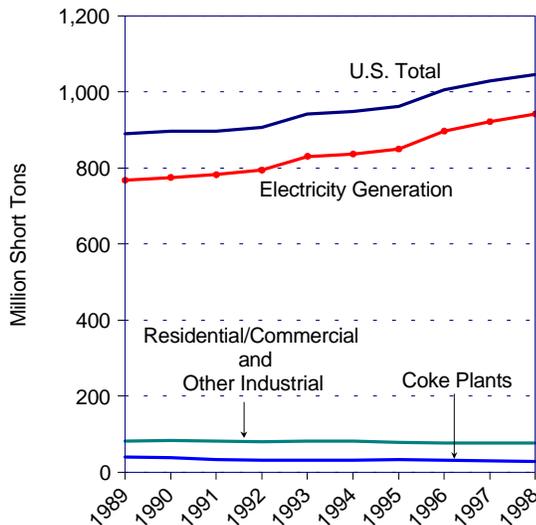
Electricity Generation Sector

National Overview

U.S. coal consumption by all users totaled 1,039.0 million short tons in 1998, a 0.9-percent increase over 1997 (Table ES1). This growth came entirely from the electric power industry (Figure ES3), as coal consumption in the non-electricity sectors decreased by 4.6 percent. Electric utilities burned 910.9 million short tons and independent power producers 26.9 million short tons, for a total of 937.8 million short tons burned for electricity generation (Figure ES4).

Much of the 15.9-million-short-ton increase in coal use for electricity generation can be attributed to replacement power for reduced hydroelectric generation. Nationwide, hydroelectric generation declined by 32 billion kilowatthours, equivalent to about 17 million short tons of coal. Almost 70 percent of the decline in

Figure ES4. Coal Consumption by Sector, 1989-1998



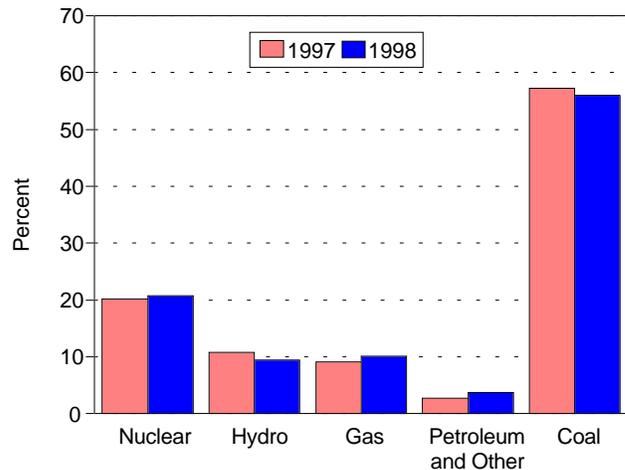
Sources: Energy Information Administration, *Quarterly Coal Report, October-December 1998*, DOE/EIA-0121(98/4Q) (Washington, DC, July 1999); *Coal Industry Annual 1997*, DOE/EIA-0584(97) (Washington, DC, December 1998); and *Electric Power Monthly, March 1999*, DOE/EIA-0226(99/03) (Washington, DC, March 1999).

hydroelectric generation occurred in the Pacific Contiguous Census Division. The Mountain and West North Central Census Divisions also showed significant declines in hydroelectric generation.

In 1998, retail sales of electricity by U.S. electric utilities increased by 3.4 percent, just under the 3.6-percent growth in the gross domestic product. However, coal use for electricity generation benefitted little from the significant growth in electricity demand because of strong competition from other fuels.

Increases in generation from nuclear power, natural gas, and oil limited growth in utility coal consumption. Nuclear-powered generation rebounded from a poor year in 1997, rising by 7.2 percent. Nine nuclear plants that had been idle during part or all of the previous year came back online. Also, capacity utilization generally rose, resulting in increases in nuclear generation in every Census Division. Gas-fired generation posted strong gains in 1998, growing by 15.9 percent. Also, with oil prices remaining at near record lows, oil-fired generation rose for a third consecutive year, increasing by 42.9 percent in 1998. Overall, coal continued to be the principal energy source for electric power generation in the United States, but its share of utility generation (including the 10 coal-fired plants sold to nonutility

Figure ES5. Share of Electric Utility Net Generation by Energy Source, 1997 vs. 1998



Source: Energy Information Administration, *Electric Power Monthly, March 1999*, DOE/EIA-0226(99/03) (Washington, DC, March 1999); Form EIA-867, "Annual Nonutility Power Producers Report," and 1998 estimates for 50 power plants sold to nonutility power producers during the year.

power producers during 1998) declined slightly to 56.0 percent in 1998 from 57.3 percent in 1997 (Figure ES5).

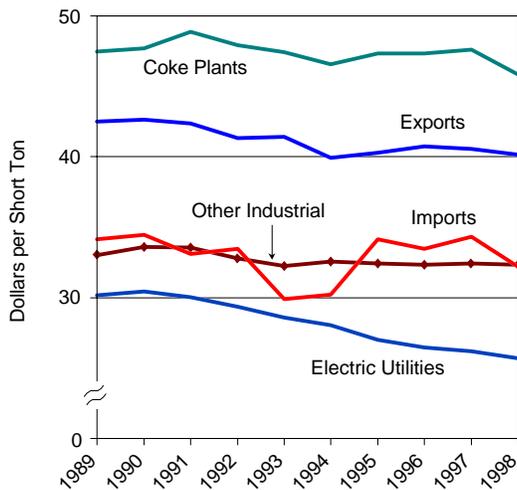
Utility coal prices continued their steady downward trend in 1998 (Figure ES6). Ongoing productivity gains in coal mining and transportation maintained the downward trend. Increased shipments of relatively low-cost western coal and the expiration of high-cost, long-term coal contracts also contributed to the downward trend. The average delivered price of coal to electric utilities declined by 2.0 percent, from \$26.16 per short ton in 1997 to \$25.64 per short ton in 1998.

Non-Electricity Sectors

Coal consumption in the non-electricity sectors (coke plants, other industrial plants, and residential/commercial users) totaled 101.1 million short tons in 1998, down by 5.7 percent from the 1997 level.

Metallurgical coal consumption (carbonization) at coke plants in the United States declined by 6.7 percent to 28.2 million short tons (Table ES1), and coke production declined by 8.8 percent to 21.3 million short tons. Pig iron production in the United States fell by 3.0 percent in 1998. The average price of metallurgical coal delivered to coke plants was down by 3.3 percent, from \$47.61 per short ton in 1997 to \$46.06 per short ton in 1998. Notable

Figure ES6. Delivered Coal Prices, 1989-1998
(Nominal Dollars)



Sources: Energy Information Administration, *Quarterly Coal Report, October-December 1998*, DOE/EIA-0121(98/4Q) (Washington, DC, May 1999); *Coal Industry Annual 1997*, DOE/EIA-0584(97) (Washington, DC, December 1998); *Electric Power Monthly, March 1999*, DOE/EIA-0226(99/03) (Washington, DC, March 1999); and U.S. Department of Commerce, Bureau of the Census, “Monthly Report EM 545” and “Monthly Report IM 145.”

here is that while two coke plants closed in 1998, one new coke plant (Indiana Harbor) opened during the year, the first new coke plant in the United States in 16 years.

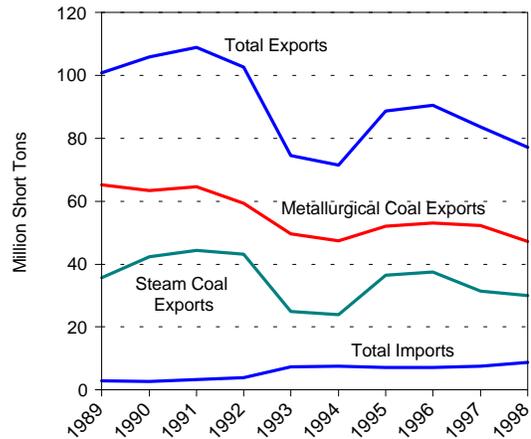
Coal consumption by other industrial plants and residential/commercial users declined by 4.1 million short tons, to a level of 73.0 million short tons in 1998. The average delivered price of coal to industrial consumers was \$32.30 per short ton, slightly below the 1997 price of \$32.41 per short ton.

Exports and Imports

Exports

The sharp decline in U.S. coal exports in 1997 continued in 1998, as exports fell by 6.6 percent to 78.0 million short tons. Unlike 1997, however, the 1998 decline was mostly in metallurgical coal, which fell by 9.7 percent to a total of 47.1 million short tons (Figure ES7). There were declines in metallurgical coal exports to all major export regions except Africa. U.S. steam coal exports similarly declined in every major market except North America (Canada and Mexico). Weak international coal prices, a strong dollar, and increased competition from other exporting countries were the major factors contributing

Figure ES7. U.S. Coal Exports and Imports, 1989-1998



Source: U.S. Department of Commerce, Bureau of the Census, “Monthly Report EM 545” and “Monthly Report IM 145.”

to these declines. The average price for U.S. steam coal exports fell by 6.7 percent in 1998 to \$30.24 per short ton. The average for metallurgical coal exports declined slightly to \$44.58 per short ton.

Exports to Europe, the primary market for U.S. steam coal, fell by 38.0 percent to 7.8 million short tons in 1998, reflecting reductions in exports to all but three countries. The pattern of exports changed dramatically. The four largest U.S. steam coal importers of 1997 in Europe—Italy, Spain, Portugal, and the United Kingdom—cut imports in 1998 by 4.4 million short tons, a 49-percent decline. On the other hand, Ireland and Germany, both relatively minor importers of U.S. steam coal in 1997, rose to second and third largest, respectively, in 1998.

Competition in the European steam coal markets came from Colombia, Venezuela, and South Africa, as well as interfuel competition from natural gas.

Steam coal exports to Asia declined by 15.3 percent to 5.5 million short tons in 1998. Japan’s imports rose slightly, but that gain was overshadowed by the decline in exports to Korea and Taiwan. In addition to weak prices and strong competition from Australia and Indonesia, U.S. exports to Asia were also hurt by the weakened Asian economies.

The African market remained tiny, importing less than 100,000 short tons of U.S. steam coal in 1998, almost all to Morocco. Likewise, the South American market for U.S. steam coal dried up in 1998, with every country reducing imports by at least half from their 1997 levels.

On the positive side, U.S. steam coal exports to Canada rose by 56.0 percent, or 5.6 million short tons, in 1998. Shipments to Canada continued to be bolstered by increased purchases by Ontario Hydro, which shut down several nuclear power plants in 1997 for upgrades, substituting increased coal-fired generation for the lost nuclear generation.

U.S. metallurgical coal exports fell by 9.7 percent in 1998 to 47.1 million short tons, victim of a worldwide recession in the iron and steel industry. Pig iron production fell by 1.3 percent worldwide in 1998. Imports of U.S. coking coal declined in every region except Africa. In Europe, by far the largest market for U.S. metallurgical coal, imports fell by 2.8 million short tons. Only Spain increased its imports noticeably, while Romania reduced its imports of U.S. metallurgical coal by 1.1 million short tons, the most among the European countries.

The rest of the world followed a similar pattern—weak increases in a few countries, substantial declines in most. Metallurgical coal exports fell in all Asian countries for a total decline of 1.2 million short tons. Exports to South America, mostly Brazil, fell by 0.8 million short tons. In North America, metallurgical coal exports to Mexico virtually disappeared, driving the region to an overall small decline. Breaking the pattern of declines, exports to Africa rose slightly in 1998, as metallurgical coal exports to South Africa increased by 32 percent (0.3 million short tons).

Overall, Brazil remained the largest importer of U.S. metallurgical coal with 6.5 million short tons in 1998, followed by Canada with 4.9 million short tons.

Imports

U.S. coal imports totaled 8.7 million short tons in 1998, a 16.5-percent increase over 1997. Imports represented less than 1 percent of total U.S. consumption and were equivalent to about 10 percent of total U.S. exports. The increase was attributable to weak prices for offshore coal and preparations by utilities to meet the stricter sulfur emissions requirements of CAAA Phase 2, which go into effect on January 1, 2000. U.S. imports of steam coal are invariably low-sulfur coal. The average price of all imported coal to the United States fell sharply to \$32.18 per short ton in 1998, a 6.2-percent decline from the 1997 price of \$34.32 per short ton (Figure ES6).

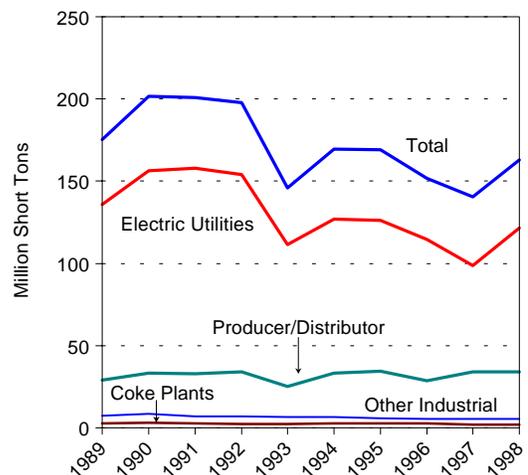
Colombia remained the largest supplier of U.S. imports, with 3.5 million short tons, followed by Venezuela (2.5 million short tons), Indonesia (1.4 million short tons), and Canada (1.2 million short tons). U.S. imports were

primarily steam coal for electricity generation, but coal from Canada was largely metallurgical coal used by coke plants in Illinois, Indiana, and Michigan. The largest importers of steam coal were Jacksonville Electric Authority, New England Power Company, Gulf Power, Central Hudson Gas and Electric Corporation, and Tampa Electric Company. Together, they received more than 70 percent of all U.S. steam coal imports.

Coal Stocks

At the end of 1998, coal stocks in the United States totaled 164.5 million short tons, an increase of 24.2 million short tons from their prior-year level. Consumers, primarily electric utilities, held a total of 128.1 million short tons in coal stocks, up by 21.2 million short tons, and coal producers and distributors held 36.5 million short tons, an increase of 2.6 million short tons from the 1997 year-end level (Figure ES8).

Figure ES8. Year-End Coal Stocks, 1989-1998



Sources: Energy Information Administration, *Quarterly Coal Report, October-December 1998*, DOE/EIA-0121(98/4Q) (Washington, DC, July 1999); *Coal Industry Annual 1997*, DOE/EIA-0584(97) (Washington, DC, December 1998); and *Electric Power Monthly, March 1999*, DOE/EIA-0226(99/03) (Washington, DC, March 1999).

Year-end utility coal stocks rose to 120.5 million short tons, an increase of 21.7 million short tons from the 1997 level. Utility coal stocks rose in every region except the New England Census Division and in nearly every State outside the New England and Mountain Census Divisions. Two factors were primarily responsible for the buildup. Areas hard hit by the severe delivery problems experienced by Union Pacific Railroad in 1997, especially the West South Central Census Division, began replenishing their stockpiles in 1998, and mild

weather in most of the country in the late fall and winter months of 1998 substantially reduced coal consumption by utilities. In addition, ice storms caused widespread power outages for significant periods of time in several States (Maine, Virginia, and Maryland), reducing the coal burn in those areas despite cold weather.

Year-end coal stocks at other industrial plants declined slightly from 1997 levels, to 5.5 million short tons. Coke plant coal stocks also remained virtually unchanged at 2.0 million short tons.

Supply

Production

Table 1. Coal Production by State, 1989, 1994-1998
(Thousand Short Tons)

Coal-Producing State and Region	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Alabama.....	23,013	24,468	24,637	24,640	23,266	27,992	-5.9	-0.3	-2.1
Alaska.....	1,344	1,450	1,481	1,698	1,567	1,582	-7.3	-3.8	-1.8
Arizona.....	11,315	11,723	10,442	11,947	13,056	11,935	-3.5	-3.5	-6
Arkansas.....	24	18	21	29	51	70	32.3	-16.8	-11.0
California.....	-	-	-	-	-	41	-	-	-
Colorado.....	29,631	27,449	24,886	25,710	25,304	17,123	7.9	4.0	6.3
Illinois.....	39,732	41,159	46,656	48,180	52,797	59,267	-3.5	-6.9	-4.3
Indiana.....	36,803	35,497	29,670	26,007	30,927	33,641	3.7	4.4	1.0
Iowa.....	-	-	-	-	46	430	-	-	-
Kansas.....	341	360	232	285	284	856	-5.3	4.6	-9.7
Kentucky Total.....	150,295	155,853	152,425	153,739	161,642	167,389	-3.6	-1.8	-1.2
Eastern.....	116,654	120,918	116,951	118,541	124,447	125,739	-3.5	-1.6	-8
Western.....	33,641	34,936	35,474	35,198	37,195	41,649	-3.7	-2.5	-2.3
Louisiana.....	3,216	3,545	3,221	3,719	3,463	2,983	-9.3	-1.8	.8
Maryland.....	4,060	4,160	4,093	3,667	3,632	3,376	-2.4	2.8	2.1
Missouri.....	372	401	710	548	838	3,378	-7.2	-18.4	-21.7
Montana.....	42,840	41,005	37,891	39,451	41,640	37,742	4.5	.7	1.4
New Mexico.....	28,597	27,025	24,067	26,813	28,041	23,702	5.8	.5	2.1
North Dakota.....	29,912	29,580	29,861	30,112	32,286	29,566	1.1	-1.9	.1
Ohio.....	28,048	29,154	28,572	26,118	29,897	33,689	-3.8	-1.6	-2.0
Oklahoma.....	1,661	1,621	1,701	1,876	1,911	1,753	2.5	-3.4	-6
Pennsylvania Total.....	81,036	76,198	67,942	61,576	62,237	70,596	6.3	6.8	1.5
Anthracite.....	5,231	4,678	4,751	4,682	4,621	3,348	11.8	3.1	5.1
Bituminous.....	75,805	71,520	63,190	56,893	57,616	67,248	6.0	7.1	1.3
Tennessee.....	2,696	3,300	3,651	3,221	2,987	6,480	-18.3	-2.5	-9.3
Texas.....	52,583	53,328	55,164	52,684	52,346	53,854	-1.4	.1	-3
Utah.....	26,075	26,683	27,507	25,167	24,399	20,102	-2.3	1.7	2.9
Virginia.....	33,747	35,837	35,590	34,099	37,129	43,006	-5.8	-2.3	-2.6
Washington.....	4,638	4,495	4,565	4,868	4,893	5,039	3.2	-1.3	-9
West Virginia Total.....	171,145	173,743	170,433	162,997	161,776	153,580	-1.5	1.4	1.2
Northern.....	44,618	42,802	45,910	46,114	49,316	56,018	4.2	-2.5	-2.5
Southern.....	126,527	130,941	124,523	116,883	112,460	97,562	-3.4	3.0	2.9
Wyoming.....	314,409	281,881	278,440	263,822	237,092	171,558	11.5	7.3	7.0
Appalachian Total¹.....	460,400	467,778	451,868	434,861	445,370	464,457	-1.6	.8	-1
Interior Total¹.....	168,374	170,863	172,848	168,526	179,858	197,880	-1.4	-1.6	-1.8
Western Total¹.....	488,762	451,291	439,140	429,587	408,276	318,391	8.3	4.6	4.9
East of Miss. River.....	570,576	579,369	563,668	544,246	566,289	599,015	-1.5	.2	-5
West of Miss. River.....	546,960	510,563	500,188	488,728	467,216	381,714	7.1	4.0	4.1
U.S. Total.....	1,117,535	1,089,932	1,063,856	1,032,974	1,033,504	980,729	2.5	2.0	1.5

¹ For a definition of coal-producing regions, see Appendix C.

Notes: Coal production excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report"; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 2. Number of Coal Mines by State, 1989, 1994-1998

Coal-Producing State and Region	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Alabama.....	53	51	53	73	85	105	3.9	-11.1	-7.3
Alaska.....	1	1	1	1	1	1	-	-	-
Arizona.....	2	2	2	2	2	2	-	-	-
Arkansas.....	3	3	5	3	6	7	-	-15.9	-9.0
California.....	-	-	-	-	-	1	-	-	-
Colorado.....	12	14	15	17	18	23	-14.3	-9.6	-7.0
Illinois.....	24	28	31	31	34	48	-14.3	-8.3	-7.4
Indiana.....	41	39	37	42	55	60	5.1	-7.1	-4.1
Iowa.....	-	-	-	-	1	5	-	-	-
Kansas.....	2	3	1	1	1	5	-33.3	18.9	-9.7
Kentucky Total.....	482	529	544	598	673	1,099	-8.9	-8.0	-8.8
Eastern.....	445	482	484	540	607	1,002	-7.7	-7.5	-8.6
Western.....	37	47	60	58	66	97	-21.3	-13.5	-10.1
Louisiana.....	2	2	2	2	2	2	-	-	-
Maryland.....	16	18	18	20	20	31	-11.1	-5.4	-7.1
Missouri.....	4	4	5	6	6	9	-	-9.6	-8.6
Montana.....	6	8	8	8	8	9	-25.0	-6.9	-4.4
New Mexico.....	7	6	6	7	7	8	16.7	-	-1.5
North Dakota.....	4	6	5	6	6	13	-33.3	-9.6	-12.3
Ohio.....	83	81	99	113	134	184	2.5	-11.3	-8.5
Oklahoma.....	8	11	12	13	14	21	-27.3	-13.0	-10.2
Pennsylvania Total.....	375	403	402	459	505	681	-6.9	-7.2	-6.4
Anthracite.....	123	131	127	134	143	191	-6.1	-3.7	-4.8
Bituminous.....	252	272	275	325	362	490	-7.3	-8.6	-7.1
Tennessee.....	27	27	26	25	24	98	-	3.0	-13.3
Texas.....	14	12	13	14	13	15	16.7	1.9	-8
Utah.....	15	12	11	13	14	21	25.0	1.7	-3.7
Virginia.....	173	191	191	194	231	365	-9.4	-7.0	-8.0
Washington.....	2	3	3	3	3	4	-33.3	-9.6	-7.4
West Virginia Total.....	346	349	386	424	462	773	-8	-7.0	-8.5
Northern.....	69	80	93	98	116	240	-13.8	-12.2	-12.9
Southern.....	277	269	293	326	346	533	3.0	-5.4	-7.0
Wyoming.....	24	25	27	29	29	30	-4.0	-4.6	-2.4
Appalachian Total¹.....	1,518	1,602	1,659	1,848	2,068	3,239	-5.2	-7.4	-8.1
Interior Total¹.....	135	149	166	170	198	269	-9.4	-9.1	-7.4
Western Total¹.....	73	77	78	86	88	112	-5.2	-4.6	-4.6
East of Miss. River.....	1,620	1,716	1,787	1,979	2,223	3,444	-5.6	-7.6	-8.0
West of Miss. River.....	106	112	116	125	131	176	-5.3	-5.1	-5.5
U.S. Total.....	1,726	1,828	1,903	2,104	2,354	3,620	-5.6	-7.5	-7.9

¹ For a definition of coal-producing regions, see Appendix C.

Note: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report"; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 3. Coal Production and Number of Mines by State and Mine Type, 1998
(Thousand Short Tons)

Coal-Producing State and Region	Underground		Surface		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Alabama.....	12	17,316	41	5,697	53	23,013
Alaska.....	—	—	1	1,344	1	1,344
Arizona.....	—	—	2	11,315	2	11,315
Arkansas.....	—	—	3	24	3	24
Colorado.....	8	19,705	4	9,926	12	29,631
Illinois.....	16	35,251	8	4,482	24	39,732
Indiana.....	3	3,445	38	33,359	41	36,803
Kansas.....	—	—	2	341	2	341
Kentucky Total.....	277	92,832	205	57,462	482	150,295
Eastern.....	259	67,066	186	49,589	445	116,654
Western.....	18	25,767	19	7,874	37	33,641
Louisiana.....	—	—	2	3,216	2	3,216
Maryland.....	2	3,325	14	734	16	4,060
Missouri.....	—	—	4	372	4	372
Montana.....	—	—	6	42,840	6	42,840
New Mexico.....	1	203	6	28,394	7	28,597
North Dakota.....	—	—	4	29,912	4	29,912
Ohio.....	8	14,604	75	13,444	83	28,048
Oklahoma.....	1	247	7	1,415	8	1,661
Pennsylvania Total.....	97	59,553	278	21,483	375	81,036
Anthracite.....	38	408	85	4,823	123	5,231
Bituminous.....	59	59,145	193	16,660	252	75,805
Tennessee.....	13	1,047	14	1,649	27	2,696
Texas.....	—	—	14	52,583	14	52,583
Utah.....	15	26,075	—	—	15	26,075
Virginia.....	127	25,212	46	8,535	173	33,747
Washington.....	—	—	2	4,638	2	4,638
West Virginia Total.....	246	117,191	100	53,955	346	171,145
Northern.....	39	39,236	30	5,382	69	44,618
Southern.....	207	77,954	70	48,572	277	126,527
Wyoming.....	1	1,723	23	312,686	24	314,409
Appalachian Total¹.....	764	305,313	754	155,086	1,518	460,399
Interior Total¹.....	38	64,709	97	103,665	135	168,374
Western Total¹.....	25	47,706	48	441,056	73	488,762
East of Miss. River.....	801	369,775	819	200,800	1,620	570,576
West of Miss. River.....	26	47,952	80	499,007	106	546,960
U.S. Total.....	827	417,728	899	699,807	1,726	1,117,535

¹ For a definition of coal-producing regions, see Appendix C.

Source: U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Notes: Coal production excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Table 4. Coal Production and Number of Mines by State, County, and Mine Type, 1998
(Thousand Short Tons)

Coal-Producing State and County	Underground		Surface		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Alabama	12	17,316	41	5,697	53	23,013
Bibb	—	—	1	22	1	22
Blount	—	—	1	*	1	*
Cullman	1	40	1	45	2	85
Fayette	1	2,419	—	—	1	2,419
Jefferson	4	8,417	3	1,245	7	9,661
Marion	—	—	1	19	1	19
Shelby	2	412	1	11	3	423
Tuscaloosa	3	5,988	4	660	7	6,648
Walker	1	41	26	3,470	27	3,510
Winston	—	—	3	225	3	225
Alaska	—	—	1	1,344	1	1,344
Yukon River	—	—	1	1,344	1	1,344
Arizona	—	—	2	11,315	2	11,315
Navajo	—	—	2	11,315	2	11,315
Arkansas	—	—	3	24	3	24
Johnson	—	—	2	20	2	20
Sebastian	—	—	1	4	1	4
Colorado	8	19,705	4	9,926	12	29,631
Delta	1	1,210	—	—	1	1,210
Fremont	1	226	—	—	1	226
Gunnison	2	7,459	—	—	2	7,459
La Plata	1	283	—	—	1	283
Mesa	1	340	—	—	1	340
Moffat	—	—	2	8,015	2	8,015
Montrose	—	—	1	322	1	322
Rio Blanco	1	1,716	—	—	1	1,716
Routt	1	8,471	1	1,589	2	10,060
Illinois	16	35,251	8	4,482	24	39,732
Gallatin	1	1,911	1	903	2	2,815
Jackson	—	—	2	474	2	474
Jefferson	1	4,097	—	—	1	4,097
Logan	1	2,372	—	—	1	2,372
Macoupin	3	5,775	—	—	3	5,775
McDonough	—	—	1	495	1	495
Perry	1	2,234	2	1,319	3	3,553
Randolph	1	2,390	—	—	1	2,390
Saline	4	8,057	1	881	5	8,938
Schuyler	—	—	1	410	1	410
Vermilion	1	795	—	—	1	795
Wabash	1	1,389	—	—	1	1,389
Washington	1	4,065	—	—	1	4,065
White	1	2,164	—	—	1	2,164
Indiana	3	3,445	38	33,359	41	36,803
Clay	—	—	4	2,208	4	2,208
Daviess	—	—	5	3,105	5	3,105
Dubois	—	—	1	250	1	250
Gibson	—	—	3	5,318	3	5,318
Greene	—	—	3	2,410	3	2,410
Knox	3	3,445	4	1,814	7	5,258
Owen	—	—	2	503	2	503
Parke	—	—	1	78	1	78
Perry	—	—	1	1	1	1
Pike	—	—	5	5,326	5	5,326
Spencer	—	—	1	234	1	234
Sullivan	—	—	2	4,737	2	4,737
Vigo	—	—	1	3,066	1	3,066
Warrick	—	—	5	4,310	5	4,310
Kansas	—	—	2	341	2	341
Linn	—	—	2	341	2	341
Kentucky	277	92,832	205	57,462	482	150,295
Bell	12	3,390	10	2,130	22	5,520
Breathitt	—	—	5	4,302	5	4,302
Butler	—	—	1	9	1	9
Christian	—	—	1	550	1	550
Clay	1	25	5	348	6	373
Daviess	—	—	1	882	1	882
Floyd	31	2,426	8	3,258	39	5,684
Harlan	29	6,629	10	1,502	39	8,131
Henderson	1	531	3	1,429	4	1,959
Hopkins	6	4,202	5	2,983	11	7,185

See footnotes at end of table.

Table 4. Coal Production and Number of Mines by State, County, and Mine Type, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State and County	Underground		Surface		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Kentucky (Continued)						
Jackson.....	—	—	1	3	1	3
Johnson.....	3	1,100	3	37	6	1,137
Knott.....	25	5,119	19	3,943	44	9,061
Knox.....	11	399	6	188	17	587
Lawrence.....	1	145	4	130	5	275
Leslie.....	8	7,470	7	2,167	15	9,637
Letcher.....	15	6,519	23	3,342	38	9,860
Magoffin.....	—	—	2	819	2	819
Martin.....	24	6,530	11	5,048	35	11,578
McLean.....	1	1,216	2	540	3	1,755
Muhlenberg.....	2	2,636	3	650	5	3,287
Ohio.....	—	—	1	343	1	343
Owsley.....	—	—	3	50	3	50
Perry.....	14	5,755	17	8,729	31	14,484
Pike.....	82	21,420	49	13,470	131	34,890
Union.....	3	7,602	—	—	3	7,602
Webster.....	5	9,580	2	488	7	10,068
Whitley.....	3	139	3	125	6	264
Louisiana	—	—	2	3,216	2	3,216
De Soto.....	—	—	1	2,242	1	2,242
Red River.....	—	—	1	974	1	974
Maryland	2	3,325	14	734	16	4,060
Allegany.....	—	—	9	524	9	524
Garrett.....	2	3,325	5	211	7	3,536
Missouri	—	—	4	372	4	372
Barton.....	—	—	1	111	1	111
Bates.....	—	—	3	260	3	260
Montana	—	—	6	42,840	6	42,840
Big Horn.....	—	—	3	28,496	3	28,496
Richland.....	—	—	1	329	1	329
Rosebud.....	—	—	2	14,015	2	14,015
New Mexico	1	203	6	28,394	7	28,597
Colfax.....	—	—	1	1,340	1	1,340
McKinley.....	—	—	2	12,013	2	12,013
San Juan.....	1	203	3	15,040	4	15,243
North Dakota	—	—	4	29,912	4	29,912
McLean.....	—	—	1	7,196	1	7,196
Mercer.....	—	—	2	19,160	2	19,160
Oliver.....	—	—	1	3,556	1	3,556
Ohio	8	14,604	75	13,444	83	28,048
Belmont.....	1	4,267	9	1,866	10	6,133
Carroll.....	—	—	5	146	5	146
Columbiana.....	1	381	6	325	7	706
Coshocton.....	—	—	5	233	5	233
Gallia.....	—	—	2	406	2	406
Guernsey.....	—	—	4	153	4	153
Harrison.....	1	1,440	8	1,035	9	2,475
Holmes.....	—	—	1	23	1	23
Jackson.....	—	—	3	1,751	3	1,751
Jefferson.....	2	483	3	197	5	680
Meigs.....	2	5,313	—	—	2	5,313
Monroe.....	1	2,720	—	—	1	2,720
Morgan.....	—	—	1	1,684	1	1,684
Muskingum.....	—	—	3	860	3	860
Noble.....	—	—	3	841	3	841
Perry.....	—	—	5	990	5	990
Stark.....	—	—	6	518	6	518
Tuscarawas.....	—	—	8	1,056	8	1,056
Vinton.....	—	—	3	1,359	3	1,359
Oklahoma	1	247	7	1,415	8	1,661
Craig.....	—	—	1	162	1	162
Haskell.....	—	—	1	641	1	641
Latimer.....	—	—	1	302	1	302
Le Flore.....	1	247	2	94	3	341
Nowata.....	—	—	1	212	1	212
Okmulgee.....	—	—	1	4	1	4
Pennsylvania	97	59,553	278	21,483	375	81,036
Allegheny.....	1	*	1	14	2	14
Armstrong.....	12	4,844	15	1,148	27	5,992
Beaver.....	1	2	—	—	1	2

See footnotes at end of table.

Table 4. Coal Production and Number of Mines by State, County, and Mine Type, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State and County	Underground		Surface		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Pennsylvania (Continued)						
Bedford	—	—	1	2	1	2
Butler	—	—	4	576	4	576
Cambria	2	32	14	2,018	16	2,051
Carbon	—	—	2	302	2	302
Clarion	—	—	8	502	8	502
Clearfield	2	168	44	4,406	46	4,574
Columbia	2	180	5	1,018	7	1,199
Dauphin	1	1	1	5	2	7
Elk	—	—	5	664	5	664
Fayette	—	—	16	435	16	435
Greene	11	37,413	2	47	13	37,460
Indiana	12	4,176	20	1,091	32	5,267
Jefferson	4	674	17	750	21	1,423
Lackawanna	—	—	4	36	4	36
Lawrence	—	—	2	123	2	123
Luzerne	—	—	14	908	14	908
Lycoming	—	—	1	314	1	314
Mercer	—	—	1	8	1	8
Northumberland	8	46	9	269	17	315
Schuylkill	27	181	48	2,238	75	2,419
Somerset	11	1,974	26	3,219	37	5,193
Sullivan	—	—	2	46	2	46
Venango	—	—	1	98	1	98
Washington	3	9,862	4	731	7	10,593
Westmoreland	—	—	11	516	11	516
Tennessee	13	1,047	14	1,649	27	2,696
Anderson	2	16	—	—	2	16
Campbell	5	470	5	382	10	852
Claiborne	4	503	4	435	8	937
Cumberland	—	—	1	86	1	86
Fentress	—	—	2	211	2	211
Morgan	1	11	—	—	1	11
Scott	1	47	—	—	1	47
Sequatchie	—	—	2	537	2	537
Texas	—	—	14	52,583	14	52,583
Atascosa	—	—	1	3,522	1	3,522
Freestone	—	—	1	4,926	1	4,926
Harrison	—	—	2	4,053	2	4,053
Hopkins	—	—	1	2,244	1	2,244
Leon	—	—	1	8,837	1	8,837
Milam	—	—	1	5,804	1	5,804
Panola	—	—	2	8,192	2	8,192
Robertson	—	—	1	1,868	1	1,868
Rusk	—	—	1	5,274	1	5,274
Titus	—	—	2	7,590	2	7,590
Webb	—	—	1	274	1	274
Utah	15	26,075	—	—	15	26,075
Carbon	10	9,539	—	—	10	9,539
Emery	4	11,384	—	—	4	11,384
Sevier	1	5,153	—	—	1	5,153
Virginia	127	25,212	46	8,535	173	33,747
Alleghany	—	—	1	109	1	109
Buchanan	55	10,941	9	1,537	64	12,477
Dickenson	14	2,271	8	971	22	3,242
Lee	5	1,057	2	169	7	1,225
Russell	6	809	2	415	8	1,224
Tazewell	12	1,807	—	—	12	1,807
Wise	35	8,327	24	5,335	59	13,662
Washington	—	—	2	4,638	2	4,638
King	—	—	1	16	1	16
Lewis	—	—	1	4,622	1	4,622
West Virginia	246	117,191	100	53,955	346	171,145
Barbour	3	1,175	2	68	5	1,243
Boone	30	21,066	8	8,420	38	29,486
Braxton	1	588	—	—	1	588
Brooke	1	1,967	—	—	1	1,967
Clay	—	—	4	6,636	4	6,636
Fayette	3	1,358	4	1,993	7	3,351
Gilmer	1	6	—	—	1	6
Grant	2	498	2	801	4	1,299

See footnotes at end of table.

Table 4. Coal Production and Number of Mines by State, County, and Mine Type, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State and County	Underground		Surface		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
West Virginia (Continued)						
Greenbrier	2	496	3	30	5	526
Harrison	5	6,467	6	121	11	6,588
Kanawha	10	4,647	6	9,478	16	14,126
Lewis	-	-	1	1	1	1
Lincoln	1	24	-	-	1	24
Logan	21	3,814	8	10,305	29	14,119
Marion	1	5,445	1	108	2	5,553
Marshall	2	11,466	-	-	2	11,466
McDowell	63	4,343	10	1,901	73	6,244
Mineral	-	-	2	94	2	94
Mingo	27	16,160	14	6,249	41	22,409
Monongalia	6	5,983	3	962	9	6,945
Nicholas	6	2,015	4	749	10	2,764
Preston	3	1,531	5	108	8	1,639
Raleigh	20	12,376	2	109	22	12,486
Randolph	2	108	-	-	2	108
Tucker	-	-	1	180	1	180
Upshur	7	1,856	5	354	12	2,210
Wayne	4	3,366	2	1,024	6	4,390
Webster	5	2,147	2	2,586	7	4,733
Wyoming	20	8,289	5	1,679	25	9,967
Wyoming	1	1,723	23	312,686	24	314,409
Campbell	-	-	15	273,866	15	273,866
Carbon	1	1,723	2	1,389	3	3,112
Converse	-	-	2	23,383	2	23,383
Lincoln	-	-	1	4,736	1	4,736
Sheridan	-	-	1	66	1	66
Sweetwater	-	-	2	9,245	2	9,245
U.S. Total	827	417,728	899	699,807	1,726	1,117,535

* Data round to zero.

Source: U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Notes: Coal production is attributed to the county in which the mine originally opened. Production excludes silt, culm, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Table 5. Underground Coal Production by State and Mining Method, 1998
(Thousand Short Tons)

Coal-Producing State and Region	Continuous ¹	Conventional ²	Longwall ³	Other ⁴	Total
Alabama.....	448	56	14,912	1,900	17,316
Colorado.....	2,060	—	17,645	—	19,705
Illinois.....	22,759	—	12,492	—	35,251
Indiana.....	3,445	—	—	—	3,445
Kentucky Total.....	74,932	7,585	9,780	535	92,832
Eastern.....	56,926	7,585	2,020	535	67,066
Western.....	18,006	—	7,761	—	25,767
Maryland.....	301	—	3,024	—	3,325
New Mexico.....	203	—	—	—	203
Ohio.....	2,304	—	12,300	—	14,604
Oklahoma.....	247	—	—	—	247
Pennsylvania Total.....	13,347	290	45,797	119	59,553
Anthracite.....	180	124	—	104	408
Bituminous.....	13,167	166	45,797	14	59,145
Tennessee.....	1,019	27	—	1	1,047
Utah.....	1,174	1,912	22,989	—	26,075
Virginia.....	13,965	3,943	7,243	61	25,212
West Virginia Total.....	60,386	4,815	51,931	58	117,191
Northern.....	8,425	1,571	29,224	17	39,236
Southern.....	51,962	3,244	22,707	41	77,954
Wyoming.....	—	—	1,723	—	1,723
Appalachian Total⁵.....	148,697	16,716	137,227	2,674	305,313
Interior Total⁵.....	44,456	—	20,253	—	64,709
Western Total⁵.....	3,437	1,912	42,357	—	47,706
East of Miss. River.....	192,906	16,716	157,479	2,674	369,775
West of Miss. River.....	3,684	1,912	42,357	—	47,952
U.S. Total.....	196,590	18,628	199,836	2,674	417,728

¹ Mines that produce greater than 50 percent of coal by continuous mining method.

² Mines that produce greater than 50 percent of coal by conventional mining method, or mines that produce less than 10,000 short tons, which are not required to provide data.

³ Mines that have any production from longwall mining method. A typical longwall mining operation uses 80 percent longwall mining and 20 percent continuous mining.

⁴ Mines that produce coal using shortwall, scoop loading, hand loading, or other mining methods or a 50/50 percent continuous/conventional split in mining method.

⁵ For a definition of coal-producing regions, see Appendix C.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 6. Coal Production and Number of Mines by State, Mine Type, and Mine Production Range, 1998
(Thousand Short Tons)

Coal-Producing State, Region and Type of Mining	Number of Mines						Production					
	Mine Production Range (thousand short tons)											
	1,000 and over	500 to 1,000	200 to 500	100 to 200	10 to 100	Less than 10	1,000 and over	500 to 1,000	200 to 500	100 to 200	10 to 100	Less than 10
Alabama	8	1	8	3	28	5	17,963	891	2,452	580	1,109	17
Underground	7	—	1	—	4	—	16,812	—	397	—	106	—
Surface	1	1	7	3	24	5	1,151	891	2,055	580	1,003	17
Alaska	1	—	—	—	—	—	1,344	—	—	—	—	—
Surface	1	—	—	—	—	—	1,344	—	—	—	—	—
Arizona	2	—	—	—	—	—	11,315	—	—	—	—	—
Surface	2	—	—	—	—	—	11,315	—	—	—	—	—
Arkansas	—	—	—	—	1	2	—	—	—	—	19	6
Surface	—	—	—	—	1	2	—	—	—	—	19	6
Colorado	8	—	4	—	—	—	28,459	—	1,172	—	—	—
Underground	5	—	3	—	—	—	18,855	—	850	—	—	—
Surface	3	—	1	—	—	—	9,604	—	322	—	—	—
Illinois	15	3	5	—	1	—	35,540	2,579	1,594	—	20	—
Underground	14	1	1	—	—	—	34,241	795	215	—	—	—
Surface	1	2	4	—	1	—	1,299	1,784	1,379	—	20	—
Indiana	14	10	7	2	4	4	26,864	7,140	2,350	241	193	15
Underground	2	—	1	—	—	—	3,049	—	396	—	—	—
Surface	12	10	6	2	4	4	23,815	7,140	1,955	241	193	15
Kansas	—	—	—	2	—	—	—	—	—	341	—	—
Surface	—	—	—	2	—	—	—	—	—	341	—	—
Kentucky Total	28	74	94	76	158	52	49,640	53,745	29,113	10,805	6,728	264
Underground	20	40	55	51	86	25	37,253	27,642	16,278	7,370	4,157	133
Surface	8	34	39	25	72	27	12,388	26,103	12,835	3,435	2,571	131
Eastern	20	60	85	74	155	51	29,316	43,867	26,034	10,564	6,618	255
Underground	12	34	51	51	86	25	16,929	23,595	14,882	7,370	4,157	133
Surface	8	26	34	23	69	26	12,388	20,272	11,152	3,194	2,461	122
Western	8	14	9	2	3	1	20,324	9,878	3,079	241	110	9
Underground	8	6	4	—	—	—	20,324	4,047	1,396	—	—	—
Surface	—	8	5	2	3	1	—	5,831	1,683	241	110	9
Louisiana	1	1	—	—	—	—	2,242	974	—	—	—	—
Surface	1	1	—	—	—	—	2,242	974	—	—	—	—
Maryland	1	—	1	3	7	4	3,024	—	301	376	331	27
Underground	1	—	1	—	—	—	3,024	—	301	—	—	—
Surface	—	—	—	3	7	4	—	—	—	376	331	27
Missouri	—	—	—	2	2	—	—	—	—	296	76	—
Surface	—	—	—	2	2	—	—	—	—	296	76	—
Montana	5	—	1	—	—	—	42,511	—	329	—	—	—
Surface	5	—	1	—	—	—	42,511	—	329	—	—	—
New Mexico	6	—	1	—	—	—	28,394	—	203	—	—	—
Underground	—	—	1	—	—	—	—	—	203	—	—	—
Surface	6	—	—	—	—	—	28,394	—	—	—	—	—
North Dakota	4	—	—	—	—	—	29,912	—	—	—	—	—
Surface	4	—	—	—	—	—	29,912	—	—	—	—	—
Ohio	7	6	14	10	34	12	16,434	4,297	4,395	1,556	1,324	42
Underground	5	—	3	—	—	—	13,740	—	864	—	—	—
Surface	2	6	11	10	34	12	2,694	4,297	3,531	1,556	1,324	42
Oklahoma	—	1	3	1	1	2	—	641	760	162	88	10
Underground	—	—	1	—	—	—	—	—	247	—	—	—
Surface	—	1	2	1	1	2	—	641	514	162	88	10
Pennsylvania Total	10	16	32	41	156	120	48,456	10,671	9,903	5,711	5,917	379
Underground	9	7	13	12	24	32	47,170	5,283	4,337	1,788	894	81
Surface	1	9	19	29	132	88	1,286	5,388	5,565	3,923	5,022	298
Anthracite	—	2	3	9	42	67	—	1,358	884	1,341	1,441	208
Underground	—	—	—	1	10	27	—	—	—	180	162	66
Surface	—	2	3	8	32	40	—	1,358	884	1,160	1,279	142
Bituminous	10	14	29	32	114	53	48,456	9,313	9,018	4,371	4,476	171
Underground	9	7	13	11	14	5	47,170	5,283	4,337	1,608	732	14
Surface	1	7	16	21	100	48	1,286	4,030	4,681	2,763	3,744	156
Tennessee	—	1	4	3	14	5	—	519	987	514	654	23
Underground	—	—	1	2	9	1	—	—	255	364	427	1
Surface	—	1	3	1	5	4	—	519	732	150	226	22
Texas	12	—	2	—	—	—	52,073	—	510	—	—	—
Surface	12	—	2	—	—	—	52,073	—	510	—	—	—

See footnotes at end of table.

Table 6. Coal Production and Number of Mines by State, Mine Type, and Mine Production Range, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State, Region and Type of Mining	Number of Mines						Production					
	Mine Production Range (thousand short tons)											
	1,000 and over	500 to 1,000	200 to 500	100 to 200	10 to 100	Less than 10	1,000 and over	500 to 1,000	200 to 500	100 to 200	10 to 100	Less than 10
Utah	8	3	2	1	1	-	22,989	2,192	628	168	97	-
Underground.....	8	3	2	1	1	-	22,989	2,192	628	168	97	-
Virginia	2	11	34	37	65	24	7,018	7,292	10,951	5,186	3,199	101
Underground.....	2	6	24	29	54	12	7,018	3,921	7,329	4,084	2,799	61
Surface.....	-	5	10	8	11	12	-	3,371	3,622	1,102	400	40
Washington	1	-	-	-	1	-	4,622	-	-	-	16	-
Surface.....	1	-	-	-	1	-	4,622	-	-	-	16	-
West Virginia Total	35	51	62	59	107	32	99,774	36,311	20,988	8,713	5,243	116
Underground.....	21	35	49	45	79	17	65,231	25,128	16,117	6,630	4,026	58
Surface.....	14	16	13	14	28	15	34,543	11,183	4,871	2,083	1,217	58
Northern	9	7	10	13	17	13	33,293	4,809	3,701	1,901	857	58
Underground.....	8	5	8	10	4	4	31,291	3,341	2,901	1,453	234	17
Surface.....	1	2	2	3	13	9	2,002	1,468	801	448	622	41
Southern	26	44	52	46	90	19	66,482	31,502	17,287	6,812	4,387	58
Underground.....	13	30	41	35	75	13	33,940	21,787	13,217	5,178	3,792	41
Surface.....	13	14	11	11	15	6	32,542	9,716	4,070	1,634	595	16
Wyoming	18	2	1	-	2	1	311,980	1,890	423	-	107	10
Underground.....	1	-	-	-	-	-	1,723	-	-	-	-	-
Surface.....	17	2	1	-	2	1	310,257	1,890	423	-	107	10
Appalachian Total ¹	83	146	240	230	566	253	221,987	103,848	76,010	33,201	24,395	959
Underground.....	57	82	143	139	256	87	169,925	57,926	44,483	20,237	12,410	333
Surface.....	26	64	97	91	310	166	52,062	45,921	31,527	12,964	11,986	626
Interior Total ¹	50	29	26	9	12	9	137,043	21,212	8,294	1,280	506	40
Underground.....	24	7	7	-	-	-	57,613	4,842	2,253	-	-	-
Surface.....	26	22	19	9	12	9	79,429	16,369	6,040	1,280	506	40
Western Total ¹	53	5	9	1	4	1	481,527	4,082	2,755	168	220	10
Underground.....	14	3	6	1	1	-	43,567	2,192	1,681	168	97	-
Surface.....	39	2	3	-	3	1	437,960	1,890	1,074	-	123	10
East of Miss. River	120	173	261	234	574	258	304,714	123,444	83,033	33,683	24,718	983
Underground.....	81	89	149	139	256	87	227,538	62,768	46,490	20,237	12,410	333
Surface.....	39	84	112	95	318	171	77,176	60,676	36,544	13,446	12,308	650
West of Miss. River	66	7	14	6	8	5	535,842	5,697	4,025	967	403	25
Underground.....	14	3	7	1	1	-	43,567	2,192	1,928	168	97	-
Surface.....	52	4	7	5	7	5	492,275	3,505	2,098	798	306	25
U.S. Total	186	180	275	240	582	263	840,556	129,141	87,059	34,650	25,121	1,009
Underground.....	95	92	156	140	257	87	271,105	64,961	48,417	20,405	12,507	333
Surface.....	91	88	119	100	325	176	569,451	64,181	38,641	14,244	12,614	676

¹ For a definition of coal-producing regions, see Appendix C.

Source: U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Notes: Coal production excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Table 7. U.S. Coal Production by Coalbed Thickness and Mine Type, 1998
(Thousand Short Tons)

Coalbed Thickness (inches)	Underground	Surface	Total
< 7	-	30	30
7-12	1,323	3,069	4,392
13-18	-	7,762	7,762
19-24	372	18,242	18,614
25-30	3,971	21,567	25,539
31-36	36,575	28,875	65,450
37-42	26,816	20,805	47,621
43-48	38,372	28,417	66,789
49-54	32,834	25,575	58,410
55-60	45,468	18,323	63,791
61-66	37,024	11,447	48,471
67-72	52,038	17,520	69,558
73-78	36,465	12,769	49,233
79-84	26,005	12,096	38,101
85-90	9,905	13,073	22,979
91-96	24,006	3,309	27,315
97-102	1,702	6,532	8,234
103-108	2,434	16,278	18,712
109-114	11,113	2,832	13,945
115-120	6,926	1,604	8,530
> 120	23,382	428,904	452,286
Unknown¹	998	777	1,775
U.S. Total	417,728	699,807	1,117,535

¹ Includes mines with production of less than 10,000 short tons, which are not required to provide data.

Notes: Coal production excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 8. U.S. Coal Production and Coalbed Thickness by Major Coalbeds and Mine Type, 1998

Coalbed ID Number ¹ Coalbed Name ²	Production (thousand short tons)			Thickness (inches)		
	Underground	Surface	Total	Average ³	Low	High
1699 Wyodak	—	279,543	279,543	798	84	1,200
0036 Pittsburgh	83,948	2,349	86,297	74	18	120
0489 No. 9	29,840	10,487	40,326	59	8	80
0111 Hazard No. 5-A	15,653	20,427	36,080	77	12	229
1569 Beulah-Zap	—	28,287	28,287	157	144	180
0484 No. 6	24,653	2,917	27,570	77	46	96
0084 Lower Kittanning	7,176	16,568	23,744	63	10	132
0135 Hazard No. 4	19,919	2,563	22,481	51	12	264
1808 Rosebud	—	17,771	17,771	262	216	276
0151 Elkhorn No. 1	13,219	4,223	17,441	50	14	100
0103 Stockton-Lewiston	3,363	14,047	17,410	77	9	120
0168 Lower Elkhorn	14,460	1,489	15,949	52	20	110
0344 Pocahontas No. 3	14,056	31	14,086	63	37	83
0071 Upper Freeport	9,909	4,135	14,044	54	6	96
0176 Eagle	11,860	1,000	12,860	60	20	104
0483 Indiana No. 6	—	12,276	12,276	49	15	80
Major Coalbeds Total	248,055	418,112	666,167	382	6	1,200
Other Coalbeds	168,675	280,918	449,593	135	2	1,440
Unknown⁴	998	777	1,775	NA	NA	NA
U.S. Total	417,728	699,807	1,117,535	283	2	1,440

¹ The coalbed ID number is a unique code assigned by EIA to each correlated coalbed or to coal-bearing geologic formations, coal groups, or coal zones.

² The coalbed name given is the name most commonly used in the State having the greatest production from that coalbed. The States having the greatest production for each coalbed are: Eastern Kentucky (coalbeds 0111, 0135, 0151, 0154, 0157, 0168, 0176); West Virginia (0036, 0084, 0103, 0344); Pennsylvania (0071,0076); Western Kentucky (0489); Illinois (0484); North Dakota (1569); Montana (1808); Wyoming (1699). In some other States where these are major producing beds, the following alternate coalbed names are also used: 0084, No. 5 Block (Eastern Kentucky); 0111, Coalburg (West Virginia); 0135, Chilton (West Virginia); 0151, Jellico (Tennessee), Taggart (Virginia), Cedar Grove (West Virginia); 0154, Lower Cedar Grove (West Virginia); 0157, Upper Standiford (Virginia), Alma (West Virginia); 0168, No. 2 Gas (West Virginia); 0176, Middle Eagle (West Virginia); 0483, No. 12 (Western Kentucky); 0484, No. 11 (Western Kentucky); 0489, No. 5 (Illinois and Indiana).

³ Average thickness is the bed thickness weighted by bed production.

⁴ Includes mines with production of less than 10,000 short tons, which are not required to provide data.

NA Not available.

Notes: Coal production excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. A major coalbed is defined here as a coalbed from which 10 million or more short tons were produced during the year. The category "Other Coalbeds" includes all coalbeds from which less than 10 million short tons were produced during the year. In some regions, coalbeds are characteristically discontinuous or uncorrelatable from one location to another, and production is identified by the geological formations, coal groups, or coal zones of the native rock where the coalbeds occur. These types of coalbeds are found primarily in the Rocky Mountain States and even in the Gulf Coast lignite belt. Coalbeds of these types are also included in "Other Coalbeds," even though production may exceed 10 million short tons. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 9. Coal Production and Number of Mines by State and Coal Rank, 1998

(Thousand Short Tons)

Coal-Producing State and Region	Bituminous		Subbituminous		Lignite		Anthracite		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Alabama.....	53	23,013	-	-	-	-	-	-	53	23,013
Alaska.....	-	-	1	1,344	-	-	-	-	1	1,344
Arizona.....	2	11,315	-	-	-	-	-	-	2	11,315
Arkansas.....	1	4	-	-	-	-	2	20	3	24
Colorado.....	9	20,027	3	9,604	-	-	-	-	12	29,631
Illinois.....	24	39,732	-	-	-	-	-	-	24	39,732
Indiana.....	41	36,803	-	-	-	-	-	-	41	36,803
Kansas.....	2	341	-	-	-	-	-	-	2	341
Kentucky Total.....	482	150,295	-	-	-	-	-	-	482	150,295
Eastern.....	445	116,654	-	-	-	-	-	-	445	116,654
Western.....	37	33,641	-	-	-	-	-	-	37	33,641
Louisiana.....	-	-	-	-	2	3,216	-	-	2	3,216
Maryland.....	16	4,060	-	-	-	-	-	-	16	4,060
Missouri.....	4	372	-	-	-	-	-	-	4	372
Montana.....	-	-	5	42,511	1	329	-	-	6	42,840
New Mexico.....	5	11,829	3	16,768	-	-	-	-	7	28,597
North Dakota.....	-	-	-	-	4	29,912	-	-	4	29,912
Ohio.....	83	28,048	-	-	-	-	-	-	83	28,048
Oklahoma.....	8	1,661	-	-	-	-	-	-	8	1,661
Pennsylvania Total.....	252	75,805	-	-	-	-	123	5,231	375	81,036
Anthracite.....	-	-	-	-	-	-	123	5,231	123	5,231
Bituminous.....	252	75,805	-	-	-	-	-	-	252	75,805
Tennessee.....	27	2,696	-	-	-	-	-	-	27	2,696
Texas.....	1	274	-	-	13	52,309	-	-	14	52,583
Utah.....	15	26,075	-	-	-	-	-	-	15	26,075
Virginia.....	173	33,747	-	-	-	-	-	-	173	33,747
Washington.....	1	16	1	4,622	-	-	-	-	2	4,638
West Virginia Total.....	346	171,145	-	-	-	-	-	-	346	171,145
Northern.....	69	44,618	-	-	-	-	-	-	69	44,618
Southern.....	277	126,527	-	-	-	-	-	-	277	126,527
Wyoming.....	3	3,112	21	311,296	-	-	-	-	24	314,409
Appalachian Total¹.....	1,395	455,168	-	-	-	-	123	5,231	1,518	460,400
Interior Total¹.....	118	112,828	-	-	15	55,526	2	20	135	168,374
Western Total¹.....	35	72,374	34	386,147	5	30,241	-	-	73	488,762
East of Miss. River.....	1,497	565,344	-	-	-	-	123	5,231	1,620	570,576
West of Miss. River.....	51	75,025	34	386,147	20	85,767	2	20	106	546,960
U.S. Total.....	1,548	640,370	34	386,147	20	85,767	125	5,252	1,726	1,117,535

¹ For a definition of coal-producing regions, see Appendix C.

Notes: Coal production excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 10. Coal Production by State, Coal Rank, and Group, 1998
(Thousand Short Tons)

Coal-Producing State and Region	Bituminous Low Volatile	Bituminous Medium Volatile	Bituminous High Volatile	Bituminous Total ¹	Subbituminous	Lignite	Anthracite	Total
Alabama	7,337	4,210	11,269	23,013	-	-	-	23,013
Alaska	-	-	-	-	1,344	-	-	1,344
Arizona	-	-	11,315	11,315	-	-	-	11,315
Arkansas	4	-	-	4	-	-	20	24
Colorado	-	-	20,027	20,027	9,604	-	-	29,631
Illinois	-	1,538	38,195	39,732	-	-	-	39,732
Indiana	-	717	36,086	36,803	-	-	-	36,803
Kansas	-	-	341	341	-	-	-	341
Kentucky Total	2,144	10,049	137,993	150,295	-	-	-	150,295
Eastern	2,144	6,573	107,829	116,654	-	-	-	116,654
Western	-	3,476	30,164	33,641	-	-	-	33,641
Louisiana	-	-	-	-	-	3,216	-	3,216
Maryland	3,565	-	495	4,060	-	-	-	4,060
Missouri	-	-	372	372	-	-	-	372
Montana	-	-	-	-	42,511	329	-	42,840
New Mexico	-	-	11,829	11,829	16,768	-	-	28,597
North Dakota	-	-	-	-	-	29,912	-	29,912
Ohio	-	564	26,634	28,048	-	-	-	28,048
Oklahoma	335	646	680	1,661	-	-	-	1,661
Pennsylvania Total	4,534	11,516	59,177	75,805	-	-	5,231	81,036
Anthracite	-	-	-	-	-	-	5,231	5,231
Bituminous	4,534	11,516	59,177	75,805	-	-	-	75,805
Tennessee	-	751	1,945	2,696	-	-	-	2,696
Texas	-	-	274	274	-	52,309	-	52,583
Utah	-	-	26,075	26,075	-	-	-	26,075
Virginia	7,941	3,836	21,970	33,747	-	-	-	33,747
Washington	-	-	16	16	4,622	-	-	4,638
West Virginia Total	15,214	9,887	146,044	171,145	-	-	-	171,145
Northern	2,074	1,258	41,286	44,618	-	-	-	44,618
Southern	13,140	8,629	104,758	126,527	-	-	-	126,527
Wyoming	-	-	3,112	3,112	311,296	-	-	314,409
Appalachian Total²	40,734	37,337	375,362	455,168	-	-	5,231	460,400
Interior Total²	339	6,377	106,112	112,828	-	55,526	20	168,374
Western Total²	-	-	72,374	72,374	386,147	30,241	-	488,762
East of Miss. River	40,734	43,067	479,808	565,344	-	-	5,231	570,576
West of Miss. River	339	646	74,040	75,025	386,147	85,767	20	546,960
U.S. Total	41,073	43,714	553,848	640,370	386,147	85,767	5,252	1,117,535

¹ Includes bituminous production with volatile content not reported.

² For a definition of coal-producing regions, see Appendix C.

Notes: Refer to the *Classification of Coals by Rank* table in Appendix C for coal group definitions. Coal production excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 11. Coal Production by State, Mine Type, and Union Type, 1998
(Thousand Short Tons)

Coal-Producing State and Region	UMWA	Other Unions	Union Total	Nonunion	Total
Alabama	16,050	-	16,050	6,945	22,996
Underground.....	14,008	-	14,008	3,307	17,316
Surface.....	2,042	-	2,042	3,638	5,680
Alaska	-	1,344	1,344	-	1,344
Surface.....	-	1,344	1,344	-	1,344
Arizona	11,315	-	11,315	-	11,315
Surface.....	11,315	-	11,315	-	11,315
Arkansas	-	-	-	19	19
Surface.....	-	-	-	19	19
Colorado	3,627	2,187	5,814	23,817	29,631
Underground.....	1,716	-	1,716	17,989	19,705
Surface.....	1,911	2,187	4,099	5,828	9,926
Illinois	22,781	3,007	25,788	13,944	39,732
Underground.....	20,967	2,127	23,093	12,157	35,251
Surface.....	1,814	881	2,695	1,787	4,482
Indiana	12,478	-	12,478	24,310	36,788
Underground.....	-	-	-	3,445	3,445
Surface.....	12,478	-	12,478	20,866	33,343
Kansas	-	-	-	341	341
Surface.....	-	-	-	341	341
Kentucky Total	13,267	122	13,388	136,109	149,497
Underground.....	10,370	122	10,491	81,675	92,166
Surface.....	2,897	-	2,897	54,434	57,331
Eastern	3,645	122	3,766	112,099	115,865
Underground.....	1,253	122	1,374	65,025	66,399
Surface.....	2,392	-	2,392	47,074	49,466
Western	9,622	-	9,622	24,009	33,631
Underground.....	9,117	-	9,117	16,650	25,767
Surface.....	505	-	505	7,359	7,864
Louisiana	-	-	-	3,216	3,216
Surface.....	-	-	-	3,216	3,216
Maryland	-	-	-	4,032	4,032
Underground.....	-	-	-	3,325	3,325
Surface.....	-	-	-	707	707
Missouri	-	-	-	333	333
Surface.....	-	-	-	333	333
Montana	13,963	17,235	31,198	11,642	42,840
Surface.....	13,963	17,235	31,198	11,642	42,840
New Mexico	8,563	15,040	23,603	4,993	28,597
Underground.....	-	-	-	203	203
Surface.....	8,563	15,040	23,603	4,791	28,394
North Dakota	2,793	3,556	6,349	23,563	29,912
Surface.....	2,793	3,556	6,349	23,563	29,912
Ohio	14,718	-	14,718	13,288	28,006
Underground.....	12,300	-	12,300	2,304	14,604
Surface.....	2,418	-	2,418	10,984	13,402
Oklahoma	-	-	-	1,651	1,651
Underground.....	-	-	-	247	247
Surface.....	-	-	-	1,405	1,405
Pennsylvania Total	36,673	55	36,728	43,866	80,595
Underground.....	34,102	-	34,102	25,371	59,473
Surface.....	2,572	55	2,627	18,495	21,122
Anthracite	1,448	55	1,503	3,521	5,023
Underground.....	-	-	-	342	342
Surface.....	1,448	55	1,503	3,178	4,681
Bituminous	35,226	-	35,226	40,346	75,572
Underground.....	34,102	-	34,102	25,029	59,131
Surface.....	1,124	-	1,124	15,317	16,441
Tennessee	-	-	-	2,673	2,673
Underground.....	-	-	-	1,046	1,046
Surface.....	-	-	-	1,628	1,628
Texas	-	27,426	27,426	25,157	52,583
Surface.....	-	27,426	27,426	25,157	52,583
Utah	7,206	-	7,206	18,869	26,075
Underground.....	7,206	-	7,206	18,869	26,075
Virginia	5,855	1,271	7,126	26,426	33,552
Underground.....	5,855	791	6,646	18,410	25,057
Surface.....	-	480	480	8,016	8,496
Washington	-	4,622	4,622	16	4,638
Surface.....	-	4,622	4,622	16	4,638
West Virginia Total	79,940	-	79,940	91,053	170,992
Underground.....	59,310	-	59,310	57,785	117,095
Surface.....	20,630	-	20,630	33,267	53,897

See footnotes at end of table.

Table 11. Coal Production by State, Mine Type, and Union Type, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State and Region	UMWA	Other Unions	Union Total	Nonunion	Total
Northern	29,781	—	29,781	14,779	44,560
Underground	29,781	—	29,781	9,439	39,219
Surface	—	—	—	5,341	5,341
Southern	50,159	—	50,159	76,273	126,432
Underground	29,529	—	29,529	48,347	77,876
Surface	20,630	—	20,630	27,926	48,556
Wyoming	4,802	10,404	15,206	299,193	314,399
Underground	—	—	—	1,723	1,723
Surface	4,802	10,404	15,206	297,470	312,676
Appalachian Total ¹	156,882	1,447	158,329	300,383	458,713
Underground	126,828	912	127,741	176,574	304,315
Surface	30,054	535	30,589	123,809	154,398
Interior Total ¹	44,881	30,434	75,314	92,981	168,295
Underground	30,084	2,127	32,210	32,498	64,709
Surface	14,797	28,307	43,104	60,482	103,586
Western Total ¹	52,269	54,390	106,659	382,094	488,752
Underground	8,922	—	8,922	38,784	47,706
Surface	43,347	54,390	97,737	343,309	441,046
East of Miss. River	201,763	4,455	206,217	362,647	568,864
Underground	156,912	3,039	159,951	208,826	368,777
Surface	44,851	1,416	46,266	153,821	200,087
West of Miss. River	52,269	81,816	134,085	412,811	546,896
Underground	8,922	—	8,922	39,031	47,952
Surface	43,347	81,816	125,163	373,780	498,943
Unknown ²	NA	NA	NA	NA	1,775
Underground	NA	NA	NA	NA	998
Surface	NA	NA	NA	NA	777
U.S. Total	254,032	86,271	340,302	775,458	1,117,535
Underground	165,834	3,039	168,873	247,857	417,728
Surface	88,198	83,232	171,430	527,601	699,807

¹ For a definition of coal-producing regions, see Appendix C.

² Includes mines with production of less than 10,000 short tons, which are not required to provide data.

NA Not available.

Notes: Coal production excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding. See Glossary for listing of other unions.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 12. Coal Disposition by State, 1998
(Thousand Short Tons)

Coal-Producing State and Region	Open Market ¹	Captive ²	Total
Alabama	21,679	395	22,074
Alaska	1,341	—	1,341
Arizona	12,169	—	12,169
Arkansas	19	—	19
Colorado	28,135	1,742	29,876
Illinois	40,082	80	40,162
Indiana	36,700	—	36,700
Kansas	334	—	334
Kentucky Total	149,687	284	149,971
Eastern	117,275	284	117,559
Western	32,412	—	32,412
Louisiana	3,331	—	3,331
Maryland	4,029	—	4,029
Missouri	373	—	373
Montana	38,666	3,987	42,653
New Mexico	27,743	314	28,057
North Dakota	29,467	1,008	30,475
Ohio	20,445	8,028	28,473
Oklahoma	1,726	—	1,726
Pennsylvania Total	78,524	1,775	80,299
Anthracite	3,634	1,334	4,968
Bituminous	74,890	441	75,331
Tennessee	2,532	150	2,682
Texas	10,857	42,457	53,314
Utah	19,800	7,593	27,393
Virginia	33,455	—	33,455
Washington	16	4,324	4,340
West Virginia Total	172,090	2,497	174,586
Northern	43,379	1,132	44,511
Southern	128,711	1,364	130,075
Wyoming	300,911	14,064	314,975
Appalachian Total³	450,029	13,129	463,157
Interior Total³	125,834	42,538	168,371
Western Total³	458,248	33,032	491,280
East of Miss. River	559,223	13,210	572,431
West of Miss. River	474,888	75,490	550,376
Total⁴	1,034,111	88,699	1,122,809
Unknown⁵	NA	NA	778
U.S. Total	NA	NA	1,123,587

¹ Open Market includes all coal sold on the open market to other coal companies or consumers.

² Captive includes all coal used by the producing company or sold to affiliated or parent companies.

³ For a definition of coal-producing regions, see Appendix C.

⁴ Excludes mines producing less than 10,000 short tons, which are not required to provide data.

⁵ Includes mines producing less than 10,000 short tons, which are not required to provide data.

NA Not available.

Notes: Coal production excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 13. Coal Mining Acreage, Production and Royalties from Federal and Indian Leases by State, 1998

Coal-Producing State and Region	Federal Leases			Indian Leases		
	Acres Leased	Production (thousand short tons)	Royalties (thousand dollars)	Acres Leased	Production (thousand short tons)	Royalties (thousand dollars)
Alabama.....	1,610	442	1,520	—	—	—
Arizona	—	—	—	64,858	11,370	32,582
Colorado	62,212	23,093	35,241	—	—	—
Kentucky.....	1,593	55	99	—	—	—
Montana.....	26,562	19,061	25,807	14,746	6,956	3,135
New Mexico	14,377	5,025	16,251	36,026	10,605	24,705
North Dakota.....	6,343	2,476	1,164	—	—	—
Oklahoma	9,130	695	537	—	—	—
Utah	50,176	24,274	35,311	—	—	—
Washington.....	521	601	1,151	—	—	—
Wyoming	117,198	266,443	168,231	—	—	—
Appalachian Total¹.....	1,610	442	1,520	—	—	—
Interior Total¹.....	10,723	750	636	—	—	—
Western Total¹.....	277,389	340,973	283,156	115,630	22,671	60,422
East of Miss. River.....	3,203	497	1,619	—	—	—
West of Miss. River.....	286,519	341,668	283,693	115,630	22,671	60,422
U.S. Total.....	289,722	342,165	285,312	115,630	22,671	60,422

¹ For a definition of coal-producing regions, see Appendix C.

Notes: U.S. Total for this table represents Federal and Indian Leases only. Output from Federal and Indian Lands is reported as sales volume, the basis for royalties. It is approximately equivalent to production, which includes coal sold and coal added to stockpiles. Totals may not equal sum of components due to independent rounding.

Source: U.S. Department of the Interior, Minerals Management Service (MMS), *Mineral Revenues, 1998, Report on Receipts from Federal and Indian Leases*.

Table 14. Major U.S. Coal Mines, 1998

Rank	Mine Name/Company	Mine Type	State	Production (short tons)
1	Rochelle Mine Complex/Powder River Coal	Surface	Wyoming	55,773,888
2	Black Thunder/Thunder Basin Coal	Surface	Wyoming	42,683,014
3	Cordero/Cordero Mining	Surface	Wyoming	36,979,323
4	Jacobs Ranch/Kerr-McGee	Surface	Wyoming	29,251,351
5	Caballo/Caballo Coal	Surface	Wyoming	25,984,949
6	Belle Ayr/Amox Coal West	Surface	Wyoming	22,482,740
7	Antelope/Antelope Coal	Surface	Wyoming	19,418,684
8	Eagle Butte/Amox Coal West	Surface	Wyoming	18,073,526
9	Buckskin/Triton Coal	Surface	Wyoming	17,141,525
10	Freedom-Coteau/Coteau Properties	Surface	North Dakota	16,367,511
11	Spring Creek/Spring Creek Coal Co	Surface	Montana	11,312,940
12	Rosebud No 6/Western Enrgy	Surface	Montana	10,527,056
13	West Decker/Decker Coal	Surface	Montana	10,475,507
14	North Antelope/Powder River Coal	Surface	Wyoming	8,866,044
15	Jewett/Northwestern Resources	Surface	Texas	8,836,861
16	Enlow Fork/Enlow Fork Mining	Underground	Pennsylvania	8,813,037
17	Foidel Creek/Twenty Mile Coal	Underground	Colorado	8,470,590
18	Navajo/BHP Minerals	Surface	New Mexico	8,366,120
19	Bailey No 1/CONSOL	Underground	Pennsylvania	8,329,437
20	Mountaineer/Mingo Logan Coal	Underground	West Virginia	7,525,504
21	McKinley/Pittsburg & Midway Coal	Surface	New Mexico	7,222,813
22	Falkirk/Falkirk Mining	Surface	North Dakota	7,195,966
23	Keyenta/Peabody Western Coal	Surface	Arizona	7,073,713
24	Coal Creek/Thunder Basin Coal	Surface	Wyoming	7,068,320
25	Absaloka/Morris-Knudsen Corp.	Surface	Montana	6,707,919
26	McElroy/CONSOL	Underground	West Virginia	6,648,704
27	Jim Bridger/Bridger Coal	Surface	Wyoming	6,439,566
28	Cumberland/Cyprus Cumberland Resources	Underground	Pennsylvania	6,272,179
29	Mine No 84/Eighty Four Mining	Underground	Pennsylvania	5,940,672
30	West Elk/Mountain Coal	Underground	Colorado	5,929,187
31	Colowyo/Colowyo Coal	Surface	Colorado	5,827,626
32	Sandow-Rockdale/ALCOA	Surface	Texas	5,804,125
33	Upper Big Branch/Performance Coal	Underground	West Virginia	5,703,853
34	Robinson Run/CONSOL	Underground	West Virginia	5,594,386
35	Martin Lake/Texas Utilities Mining	Surface	Texas	5,570,195
36	Galatia/American Coal Company	Underground	Illinois	5,503,469
37	Loveridge No 22/CONSOL	Underground	West Virginia	5,444,740
38	Emerald No 1/Cyprus Emerald Resources	Underground	Pennsylvania	5,364,369
39	Rawhide/Caballo Coal	Surface	Wyoming	5,305,697
40	Oak Hill/Texas Utilities Mining	Surface	Texas	5,273,887
41	SUFCO/Canyon Fuel	Underground	Utah	5,152,810
42	Samples/Catenary Coal	Surface	West Virginia	4,950,362
43	Big Brown/Texas Utilities Mining	Surface	Texas	4,926,084
44	No 50/US Steel Mining	Underground	West Virginia	4,847,571
45	Shoemaker/CONSOL	Underground	West Virginia	4,817,084
46	Lee Ranch/Lee Ranch Coal	Surface	New Mexico	4,790,613
47	Federal No 2/Eastern Associated Mining	Underground	West Virginia	4,752,264
48	Kemmerer/Pittsburg & Midway Coal	Surface	Wyoming	4,736,231
49	Centralia/Centralia Mining	Surface	Washington	4,622,314
50	No 13 Baker/Lodestar Energy	Underground	Kentucky	4,398,310
51	Buchanan/CONSOL	Underground	Virginia	4,294,596
52	Powhatan No 6/Ohio Valley Coal	Underground	Ohio	4,267,230
53	Dilworth/CONSOL	Underground	Pennsylvania	4,243,891
54	Black Mesa/Peabody Western	Surface	Arizona	4,241,031
55	Winfield/Texas Utilities Mining	Surface	Texas	4,217,916
56	Shoal Creek/Drummond Co	Underground	Alabama	4,180,152
57	Rend Lake/CONSOL	Underground	Illinois	4,097,120
58	Marissa/Peabody Coal	Underground	Illinois	4,065,152
59	Dave Johnston/Pacificorp	Surface	Wyoming	3,964,694
60	No 2/Fola Coal	Surface	West Virginia	3,935,828
61	Blacksville No 2/CONSOL	Underground	Pennsylvania	3,898,364
62	La Plata/San Juan Coal	Surface	New Mexico	3,865,019
63	South Hallsville No 1/Sabine Mining	Surface	Texas	3,816,570
64	Old Hickory/Hobet Mining	Surface	West Virginia	3,799,657
65	Deer Creek/Pacificorp	Underground	Utah	3,787,298
66	Harris No 1/Eastern Associated Coal	Underground	West Virginia	3,589,690
67	Center/BNI Coal	Surface	North Dakota	3,555,996
68	San Miguel/North American Coal	Surface	Texas	3,522,168
69	Crandall Canyon/Genwal Resources	Underground	Utah	3,517,638
*	Subtotal			620,424,646
*	All Other Mines			497,110,521
*	U.S. Total			1,117,535,167

Notes: Major mines are mines that produced more than 3.5 million short tons in 1998. The company is the firm operating the mine. Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report"; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Production Report."

Table 15. Major U.S. Coal Producers, 1998

Rank	Company Name	Production (thousand short tons)	Percent of Total Production
1	Peabody Holding Co., Inc.	157,141	14.1
2	RTZ America Inc.	125,023	11.2
3	Arch Coal Co	88,867	8.0
4	Consol Energy Inc.	73,198	6.5
5	U S Steel Mining Co.	59,358	5.3
6	Zeigler Coal Holding Co.	32,432	2.9
7	Fluor Corp.	30,402	2.7
8	North American Coal Corp.	28,354	2.5
9	Texas Utilities Co.	28,226	2.5
10	Cyprus Minerals Co.	25,795	2.3
11	Montana Power Co.	20,609	1.8
12	Chevron Corp.	16,541	1.5
13	BHP Minerals	15,243	1.4
14	Mapco Coal Inc.	13,688	1.2
15	TECO Energy	12,248	1.1
16	Kiewit Coal Properties Inc.	10,541	.9
17	Canyon Fuel Co.	9,946	.9
18	Rochester & Pittsburg Coal Co.	9,829	.9
19	RENCoal Inc.	9,714	.9
20	AEP Service Corp.	8,964	.8
21	James River Coal Co.	8,811	.8
22	Celotex Corp.	7,409	.7
23	Pittston Coal Co.	6,726	.6
24	Westmoreland Resources Inc.	6,708	.6
25	Drummond Coal Co.	6,312	.6
26	Aluminum Co of America	5,804	.5
27	Cantenary Coal Co.	5,773	.5
28	American Coal Co.	5,503	.5
29	Indep Coal Co.	5,454	.5
30	Leslie Resources Inc.	5,237	.5
31	Coastal Corp.	5,126	.5
32	Addington Enterprise Inc.	4,848	.4
33	Hanson PLC	4,791	.4
34	Ohio Valley Resources Inc.	4,267	.4
35	Andalex Resources Inc.	4,244	.4
36	Kindill Mining Inc.	4,176	.4
37	Pyxis Resources Co.	4,061	.4
38	Fola Coal Company	3,936	.4
39	Minnesota Power & Light	3,556	.3
40	San Miguel Elec CoOp Inc.	3,522	.3
41	Genwal Resources Inc.	3,518	.3
42	General Dynamics Corp.	3,505	.3
43	Black Hills Corp.	3,281	.3
44	Pen Holdings	3,211	.3
45	MDU Resources Group Inc.	3,122	.3
46	Golden Oak Mining Co.	3,108	.3
47	Sunburst Resources Inc.	2,935	.3
48	Exxon Corp.	2,891	.3
49	Sugar Camp Coal LLC	2,815	.3
50	Union Pacific Corp.	2,806	.3
51	Sunoco Inc.	2,739	.2
52	Solar Sources Inc.	2,389	.2
53	United Minerals Co LLC	2,329	.2
*	Subtotal	921,032	82.4
*	All other coal producers	196,503	17.6
*	U.S. Total	1,117,535	100.0

Notes: Major coal producers are companies that produced more than 2.3 million short tons in 1998. The company is the firm owning the mineral rights to the mined coal.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report", and Financial Reporting System; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Production Report."

Productive Capacity

Table 16. Productive Capacity of Coal Mines by State, 1989, 1994-1998

(Thousand Short Tons)

Coal-Producing State and Region	1998	1997	1996	1995	1994	1989 ¹	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Alabama.....	27,891	29,081	32,159	32,546	33,049	NA	-4.1	-4.1	NA
Alaska.....	w	w	w	w	w	NA	w	w	NA
Arizona.....	w	w	w	w	w	NA	w	w	NA
Arkansas.....	w	w	-	w	w	NA	w	w	NA
California.....	-	-	-	-	-	NA	-	-	NA
Colorado.....	36,658	35,466	29,330	32,435	31,075	NA	3.4	4.2	NA
Illinois.....	47,625	51,523	61,727	56,627	69,414	NA	-7.6	-9.0	NA
Indiana.....	42,190	36,999	35,564	35,256	38,931	NA	14.0	2.0	NA
Iowa.....	-	-	-	-	w	NA	-	-	NA
Kansas.....	w	w	w	w	w	NA	w	w	NA
Kentucky Total.....	186,737	195,453	189,225	203,173	213,427	NA	-4.4	-3.3	NA
Eastern.....	145,305	152,681	145,691	152,111	161,731	NA	-4.8	-2.6	NA
Western.....	41,433	42,771	43,534	51,062	51,696	NA	-3.1	-5.4	NA
Louisiana.....	w	w	w	w	w	NA	w	w	NA
Maryland.....	4,250	4,884	4,935	4,408	4,332	NA	-13.0	-5	NA
Missouri.....	851	690	1,046	1,081	1,209	NA	23.4	-8.4	NA
Montana.....	55,882	56,140	56,175	51,597	51,104	NA	-4	2.3	NA
New Mexico.....	32,790	31,604	32,695	32,760	32,807	NA	3.8	*	NA
North Dakota.....	32,484	32,568	32,184	34,464	35,920	NA	-3	-2.5	NA
Ohio.....	33,691	33,443	37,584	34,011	43,925	NA	.7	-6.4	NA
Oklahoma.....	1,981	2,451	1,981	2,557	2,251	NA	-19.2	-3.1	NA
Pennsylvania Total.....	94,511	87,527	81,684	77,187	80,975	NA	8.0	3.9	NA
Anthracite.....	6,827	5,504	5,504	6,547	5,776	NA	24.0	4.3	NA
Bituminous.....	87,684	82,024	76,180	70,640	75,200	NA	6.9	3.9	NA
Tennessee.....	4,144	4,100	4,009	3,750	3,409	NA	1.1	5.0	NA
Texas.....	54,475	54,614	59,604	54,758	55,856	NA	-3	-6	NA
Utah.....	33,838	30,281	30,230	30,888	27,640	NA	11.7	5.2	NA
Virginia.....	38,884	43,023	41,593	43,037	46,462	NA	-9.6	-4.3	NA
Washington.....	w	w	w	w	w	NA	w	w	NA
West Virginia Total.....	203,401	203,006	217,409	204,837	201,684	NA	.2	.2	NA
Northern.....	48,756	50,744	54,602	56,355	59,295	NA	-3.9	-4.8	NA
Southern.....	154,644	152,262	162,807	148,482	142,388	NA	1.6	2.1	NA
Wyoming.....	379,380	366,680	350,908	337,184	321,046	NA	3.5	4.3	NA
Appalachian Total².....	552,075	557,745	565,064	551,888	575,568	NA	-1.0	-1.0	NA
Interior Total².....	192,784	193,720	207,658	205,393	223,897	NA	-5	-3.7	NA
Western Total².....	591,271	574,139	551,990	541,773	521,191	NA	3.0	3.2	NA
East of Miss. River.....	683,324	689,038	705,890	694,832	735,609	NA	-.8	-1.8	NA
West of Miss. River.....	652,807	636,566	618,823	604,222	585,047	NA	2.5	2.8	NA
U.S. Total.....	1,336,130	1,325,604	1,324,712	1,299,054	1,320,656	NA	.8	.3	NA

¹ For 1989, the Form EIA-7A solicited data on "Daily Productive Capacity." As a result, data for annual productive capacity is not available for that year.

² For a definition of coal-producing regions, see Appendix C.

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

NA Not available.

Notes: Productive capacity is the maximum amount of coal that can be produced annually as reported by mining companies on Form EIA-7A. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data. Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, Form EIA-7A, "Coal Production Report."

Table 17. Capacity Utilization of Coal Mines by State, 1989, 1994-1998
(Percent)

Coal-Producing State and Region	1998	1997	1996	1995	1994	1989 ¹
Alabama	82.45	84.05	76.57	75.52	70.19	NA
Alaska	w	w	w	w	w	NA
Arizona.....	w	w	w	w	w	NA
Arkansas.....	w	w	-	w	w	NA
California	-	-	-	-	-	NA
Colorado.....	80.83	77.39	84.85	79.27	81.41	NA
Illinois	83.43	79.87	75.58	85.08	76.06	NA
Indiana	87.19	95.94	83.42	73.70	79.37	NA
Iowa	-	-	-	-	w	NA
Kansas.....	w	w	w	w	w	NA
Kentucky Total.....	80.06	79.62	80.38	75.49	75.54	NA
Eastern.....	79.74	79.05	80.07	77.71	76.70	NA
Western.....	81.17	81.63	81.40	68.89	71.89	NA
Louisiana.....	w	w	w	w	w	NA
Maryland.....	94.88	84.80	82.42	82.65	83.07	NA
Missouri.....	39.15	57.36	67.85	49.88	69.35	NA
Montana.....	76.66	73.03	67.45	76.44	81.47	NA
New Mexico	87.21	85.51	73.61	81.85	85.47	NA
North Dakota	92.08	90.82	92.78	87.37	89.88	NA
Ohio	83.13	87.07	75.88	76.55	67.87	NA
Oklahoma.....	83.36	65.87	85.16	73.14	83.98	NA
Pennsylvania Total.....	85.28	86.46	82.53	78.81	75.89	NA
Anthracite.....	73.57	80.95	82.56	67.12	74.02	NA
Bituminous.....	86.19	86.83	82.53	79.89	76.03	NA
Tennessee.....	64.52	80.26	90.32	85.51	87.27	NA
Texas.....	96.53	97.64	92.55	96.21	93.72	NA
Utah.....	77.06	88.09	90.97	81.48	88.27	NA
Virginia.....	86.29	83.09	85.34	79.07	79.61	NA
Washington.....	w	w	w	w	w	NA
West Virginia Total.....	84.07	85.50	78.32	79.50	80.07	NA
Northern.....	91.39	84.23	83.95	81.70	83.04	NA
Southern.....	81.76	85.92	76.43	78.67	78.83	NA
Wyoming.....	82.87	76.87	79.35	78.24	73.85	NA
Appalachian Total².....	83.09	83.67	79.75	78.53	77.07	NA
Interior Total².....	87.30	88.18	83.20	82.01	80.29	NA
Western Total².....	82.66	78.60	79.55	79.29	78.33	NA
East of Miss. River.....	83.25	83.92	79.68	78.11	76.73	NA
West of Miss. River.....	83.78	80.20	80.82	80.88	79.85	NA
U.S. Total.....	83.51	82.13	80.21	79.40	78.11	NA

¹ For 1989, the Form EIA-7A solicited data on "Daily Productive Capacity." As a result, data for annual productive capacity, as well as capacity utilization, is not available for that year.

² For a definition of coal-producing regions, see Appendix C.

w Withheld to avoid disclosure of individual company data.

NA Not available.

Notes: Capacity utilization is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data.

Source: Energy Information Administration, Form EIA-7A, "Coal Production Report."

Table 18. Production, Productive Capacity, and Capacity Utilization of Coal Mines by State and Mine Type, 1998
(Thousand Short Tons)

Coal-Producing State and Region	Underground			Surface			Total		
	Production	Productive Capacity	Capacity Utilization (percent)	Production	Productive Capacity	Capacity Utilization (percent)	Production	Productive Capacity	Capacity Utilization (percent)
Alabama.....	17,316	21,156	81.85	5,680	6,735	84.34	22,996	27,891	82.45
Alaska.....	-	-	-	1,344	w	w	1,344	w	w
Arizona.....	-	-	-	11,315	w	w	11,315	w	w
Arkansas.....	-	-	-	19	w	w	19	w	w
Colorado.....	19,705	26,331	74.84	9,926	10,328	96.11	29,631	36,658	80.83
Illinois.....	35,251	40,073	87.97	4,482	7,552	59.34	39,732	47,625	83.43
Indiana.....	3,445	w	w	33,343	w	w	36,788	42,190	87.19
Kansas.....	-	-	-	341	w	w	341	w	w
Kentucky Total.....	92,166	112,829	81.69	57,331	73,908	77.57	149,497	186,737	80.06
Eastern.....	66,399	83,056	79.94	49,466	62,248	79.47	115,865	145,305	79.74
Western.....	25,767	29,773	86.55	7,864	11,660	67.45	33,631	41,433	81.17
Louisiana.....	-	-	-	3,216	w	w	3,216	w	w
Maryland.....	3,325	w	w	707	w	w	4,032	4,250	94.88
Missouri.....	-	-	-	333	851	39.15	333	851	39.15
Montana.....	-	-	-	42,840	55,882	76.66	42,840	55,882	76.66
New Mexico.....	203	w	w	28,394	w	w	28,597	32,790	87.21
North Dakota.....	-	-	-	29,912	32,484	92.08	29,912	32,484	92.08
Ohio.....	14,604	15,932	91.66	13,402	17,759	75.47	28,006	33,691	83.13
Oklahoma.....	247	w	w	1,405	w	w	1,651	1,981	83.36
Pennsylvania Total.....	59,473	66,763	89.08	21,122	27,748	76.12	80,595	94,511	85.28
Anthracite.....	342	567	60.37	4,681	6,260	74.77	5,023	6,827	73.57
Bituminous.....	59,131	66,196	89.33	16,441	21,487	76.51	75,572	87,684	86.19
Tennessee.....	1,046	w	w	1,628	w	w	2,673	4,144	64.52
Texas.....	-	-	-	52,583	54,475	96.53	52,583	54,475	96.53
Utah.....	26,075	33,838	77.06	-	-	-	26,075	33,838	77.06
Virginia.....	25,057	27,606	90.77	8,496	11,278	75.33	33,552	38,884	86.29
Washington.....	-	-	-	4,638	w	w	4,638	w	w
West Virginia Total.....	117,095	133,918	87.44	53,897	69,483	77.57	170,992	203,401	84.07
Northern.....	39,219	41,656	94.15	5,341	7,100	75.22	44,560	48,756	91.39
Southern.....	77,876	92,261	84.41	48,556	62,383	77.84	126,432	154,644	81.76
Wyoming.....	1,723	w	w	312,676	w	w	314,399	379,380	82.87
Appalachian Total¹.....	304,315	353,830	86.01	154,398	198,246	77.88	458,713	552,075	83.09
Interior Total¹.....	64,709	74,035	87.40	103,586	118,749	87.23	168,295	192,784	87.30
Western Total¹.....	47,706	64,299	74.19	441,046	526,972	83.69	488,752	591,271	82.66
East of Miss. River.....	368,777	427,505	86.26	200,087	255,819	78.21	568,864	683,324	83.25
West of Miss. River.....	47,952	64,659	74.16	498,943	588,148	84.83	546,896	652,807	83.78
Unknown².....	998	NA	NA	777	NA	NA	1,775	NA	NA
U.S. Total.....	417,728	492,164	84.67	699,807	843,967	82.83	1,117,535	1,336,130	83.51

¹ For a definition of coal-producing regions, see Appendix C.

² Includes mines with production of less than 10,000 short tons, which are not required to provide data.

w Withheld to avoid disclosure of individual company data.

NA Not available.

Notes: Productive capacity is the maximum amount of coal that can be produced annually as reported by mining companies on Form EIA-7A. Capacity utilization is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Coal production excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

**Table 19. Productive Capacity and Capacity Utilization of Underground Coal Mines
by State and Mining Method, 1998**
(Thousand Short Tons)

Coal-Producing State and Region	Continuous ¹		Conventional ¹		Longwall ¹		Other ^{1 2}	
	Productive Capacity	Capacity Utilization (percent)	Productive Capacity	Capacity Utilization (percent)	Productive Capacity	Capacity Utilization (percent)	Productive Capacity	Capacity Utilization (percent)
Alabama.....	w	w	w	w	14,551	83.52	1,919	74.27
Colorado	w	w	-	-	17,886	76.90	w	w
Illinois.....	29,010	83.72	w	w	w	w	-	-
Indiana.....	w	w	-	-	-	-	-	-
Kentucky Total.....	92,878	81.66	w	w	11,179	71.73	w	w
Eastern	70,205	80.44	w	w	w	w	w	w
Western.....	22,673	85.42	-	-	w	w	-	-
Maryland.....	w	w	-	-	w	w	-	-
New Mexico.....	w	w	-	-	-	-	-	-
Ohio.....	4,741	85.37	-	-	11,191	94.33	-	-
Oklahoma.....	w	w	-	-	-	-	-	-
Pennsylvania Total.....	24,184	73.80	w	w	42,046	98.22	w	w
Anthracite	w	w	w	w	-	-	w	w
Bituminous	w	w	w	w	42,046	98.22	-	-
Tennessee.....	w	w	w	w	-	-	-	-
Utah.....	w	w	w	w	23,262	81.44	-	-
Virginia.....	16,615	87.01	w	w	w	w	-	-
West Virginia Total.....	82,361	82.31	5,022	96.76	46,527	95.51	8	68.19
Northern.....	12,170	84.44	1,618	99.54	27,869	98.08	-	-
Southern.....	70,191	81.94	3,404	95.44	18,658	91.69	8	68.19
Wyoming.....	w	w	-	-	w	w	-	-
Appalachian Total³.....	205,506	80.80	w	w	w	w	w	w
Interior Total³.....	55,872	84.74	-	-	w	w	-	-
Western Total³.....	15,703	65.78	w	w	44,682	76.89	w	w
East of Miss. River.....	261,019	81.66	w	w	146,195	93.50	w	w
West of Miss. River.....	16,063	65.84	w	w	44,682	76.89	w	w
U.S. Total.....	277,082	80.74	21,158	92.88	190,877	89.61	3,047	76.15

¹ Calculated by multiplying reported mining method percentages by the individual mine capacity.

² Includes shortwall, scoop loading, hand loading and unknown.

³ For a definition of coal-producing regions, see Appendix C.

^w Withheld to avoid disclosure of individual company data.

Notes: Productive capacity is the maximum amount of coal that can be produced annually as reported by mining companies on Form EIA-7A. Capacity utilization is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Excludes mines producing less than 10,000 short tons, which are not required to provide data. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 20. Productive Capacity and Capacity Utilization of Coal Mines by State and Coal Rank, 1998
(Thousand Short Tons)

Coal-Producing State and Region	Bituminous		Subbituminous		Lignite		Anthracite	
	Productive Capacity	Capacity Utilization (percent)	Productive Capacity	Capacity Utilization (percent)	Productive Capacity	Capacity Utilization (percent)	Productive Capacity	Capacity Utilization (percent)
Alabama.....	27,891	82.45	-	-	-	-	-	-
Alaska.....	-	-	w	w	-	-	-	-
Arizona.....	w	w	-	-	-	-	-	-
Arkansas.....	-	-	-	-	-	-	w	w
Colorado.....	26,731	74.92	9,928	96.74	-	-	-	-
Illinois.....	47,625	83.43	-	-	-	-	-	-
Indiana.....	42,190	87.19	-	-	-	-	-	-
Kansas.....	w	w	-	-	-	-	-	-
Kentucky Total.....	186,737	80.06	-	-	-	-	-	-
Eastern.....	145,305	79.74	-	-	-	-	-	-
Western.....	41,433	81.17	-	-	-	-	-	-
Louisiana.....	-	-	-	-	w	w	-	-
Maryland.....	4,250	94.88	-	-	-	-	-	-
Missouri.....	851	39.15	-	-	-	-	-	-
Montana.....	-	-	w	w	w	w	-	-
New Mexico.....	w	w	w	w	-	-	-	-
North Dakota.....	-	-	-	-	32,484	92.08	-	-
Ohio.....	33,691	83.13	-	-	-	-	-	-
Oklahoma.....	1,981	83.36	-	-	-	-	-	-
Pennsylvania Total.....	87,684	86.19	-	-	-	-	6,827	73.57
Anthracite.....	-	-	-	-	-	-	6,827	73.57
Bituminous.....	87,684	86.19	-	-	-	-	-	-
Tennessee.....	4,144	64.52	-	-	-	-	-	-
Texas.....	w	w	-	-	w	w	-	-
Utah.....	33,838	77.06	-	-	-	-	-	-
Virginia.....	38,884	86.29	-	-	-	-	-	-
Washington.....	w	w	w	w	-	-	-	-
West Virginia Total.....	203,401	84.07	-	-	-	-	-	-
Northern.....	48,756	91.39	-	-	-	-	-	-
Southern.....	154,644	81.76	-	-	-	-	-	-
Wyoming.....	w	w	w	w	-	-	-	-
Appalachian Total¹.....	545,248	83.21	-	-	-	-	6,827	73.57
Interior Total¹.....	w	w	-	-	w	w	w	w
Western Total¹.....	w	w	461,434	83.39	w	w	-	-
East of Miss. River.....	676,496	83.35	-	-	-	-	6,827	73.57
West of Miss. River.....	100,422	74.81	461,434	83.39	90,932	94.32	w	w
U.S. Total.....	776,918	82.18	461,434	83.39	90,932	94.32	² 6,827	² 73.57

¹ For a definition of coal-producing regions, see Appendix C.

² Does not include Arkansas.

w Withheld to avoid disclosure of individual company data.

Notes: Refer to the *Classification of Coals by Rank* table in Appendix C for coal rank definitions. Productive capacity is the maximum amount of coal that can be produced annually as reported by mining companies on Form EIA-7A. Capacity utilization is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 21. Productive Capacity and Capacity Utilization of Coal Mines by State and Mine Production Range, 1998
(Thousand Short Tons, Percent)

Coal-Producing State and Region	Productive Capacity					Capacity Utilization (percent)				
	Mine Production Range (thousand short tons)									
	1,000 and over	500 to 1,000	200 to 500	100 to 200	10 to 100	1,000 and over	500 to 1,000	200 to 500	100 to 200	10 to 100
Alabama.....	21,795	w	2,603	w	w	82.42	w	94.20	w	w
Alaska.....	w	-	-	-	-	w	-	-	-	-
Arizona.....	w	-	-	-	-	w	-	-	-	-
Arkansas.....	-	-	-	-	w	-	-	-	-	w
Colorado.....	34,538	-	2,120	-	-	82.40	-	55.27	-	-
Illinois.....	42,118	w	w	-	w	84.38	w	w	-	w
Indiana.....	29,514	9,217	2,853	w	w	91.02	77.46	82.39	w	w
Kansas.....	-	-	-	w	-	-	-	-	w	-
Kentucky Total.....	55,827	62,353	35,010	15,162	18,386	88.92	85.36	83.16	71.27	36.54
Eastern.....	33,835	48,434	30,446	14,314	18,276	86.65	89.49	85.51	73.80	36.15
Western.....	21,993	13,919	4,564	848	110	92.41	70.97	67.46	28.41	100.00
Louisiana.....	w	w	-	-	-	w	w	-	-	-
Maryland.....	w	-	w	w	435	w	-	w	w	76.10
Missouri.....	-	-	-	w	w	-	-	-	w	w
Montana.....	55,434	-	w	-	-	76.69	-	w	-	-
New Mexico.....	32,340	-	450	-	-	87.80	-	45.07	-	-
North Dakota.....	32,484	-	-	-	-	92.08	-	-	-	-
Ohio.....	18,892	4,852	5,730	1,746	2,470	86.99	88.55	76.70	89.09	53.63
Oklahoma.....	-	700	w	189	w	-	91.53	w	85.61	w
Pennsylvania Total.....	51,473	12,876	12,687	8,632	8,844	94.14	82.88	78.05	66.16	66.19
Anthracite.....	-	w	1,025	2,315	2,110	-	w	86.30	57.91	68.28
Bituminous.....	51,473	w	11,662	6,317	6,734	94.14	w	77.33	69.19	65.54
Tennessee.....	-	w	1,178	748	w	-	w	83.72	68.71	w
Texas.....	53,550	-	w	-	-	97.24	-	w	-	-
Utah.....	28,450	w	628	1,000	600	80.80	w	100.00	16.85	16.20
Virginia.....	w	w	12,678	6,622	4,342	w	w	86.38	78.32	71.50
Washington.....	w	-	-	-	w	w	-	-	-	w
West Virginia Total.....	111,223	45,005	26,024	12,318	8,831	89.71	80.68	80.65	70.74	58.96
Northern.....	35,121	6,092	4,023	2,188	1,332	94.79	78.93	91.99	86.90	64.29
Southern.....	76,102	38,913	22,000	10,130	7,498	87.36	80.95	78.57	67.24	58.01
Wyoming.....	351,280	w	w	-	w	w	w	21.14	-	w
Appalachian Total¹.....	247,673	120,389	91,647	45,605	46,762	89.63	85.83	82.94	72.80	51.73
Interior Total¹.....	149,924	28,476	11,261	w	w	91.41	74.49	73.65	w	w
Western Total¹.....	554,748	11,160	5,647	w	w	86.80	36.58	48.79	w	w
East of Miss. River.....	341,297	147,065	101,011	46,694	47,257	89.28	83.58	82.20	72.14	51.87
West of Miss. River.....	611,048	12,960	7,544	2,160	19,095	87.69	43.96	53.36	44.74	1.91
U.S. Total.....	952,345	160,025	108,554	48,854	66,352	88.26	80.37	80.20	70.92	37.49

¹ For a definition of coal-producing regions, see Appendix C.

^w Withheld to avoid disclosure of individual company data.

Notes: Productive capacity is the maximum amount of coal that can be produced annually as reported by mining companies on Form EIA-7A. Capacity utilization is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 22. Productive Capacity and Productivity of Coal Mines by State and Capacity Utilization Range, 1998
(Thousand Short Tons, Short Tons per Miner per Hour)

Coal-Producing State and Region	Productive Capacity						Productivity					
	Capacity Utilization Range (percent)											Total
	90 and over	80 to 90	70 to 80	60 to 70	Less than 60	Total	90 and over	80 to 90	70 to 80	60 to 70	Less than 60	
Alabama.....	10,058	7,859	w	w	968	27,891	2.89	2.29	1.75	2.36	0.43	2.33
Alaska.....	-	-	-	-	w	w	-	-	-	-	5.45	5.45
Arizona.....	w	w	-	-	-	w	7.44	6.61	-	-	-	6.43
Arkansas.....	w	-	-	-	-	w	1.95	-	-	-	-	1.95
Colorado.....	18,738	9,520	-	w	w	36,658	9.62	8.90	-	5.36	4.67	8.47
Illinois.....	22,272	w	11,477	w	4,600	47,625	4.51	3.90	4.88	4.48	2.06	4.23
Indiana.....	16,044	w	w	w	750	42,190	5.17	5.48	6.56	5.19	1.25	5.31
Kansas.....	w	-	-	-	-	w	7.49	-	-	-	-	7.49
Kentucky Total.....	91,211	39,393	12,725	9,823	33,585	186,737	4.41	4.49	4.35	3.55	1.23	3.73
Eastern.....	70,868	30,453	12,725	5,273	25,985	145,305	4.29	4.56	4.35	3.18	1.06	3.64
Western.....	20,343	8,940	-	4,550	7,600	41,433	4.92	4.25	-	4.10	1.86	4.05
Louisiana.....	-	w	-	-	-	w	-	9.59	-	-	-	9.59
Maryland.....	3,590	w	350	w	240	4,250	5.35	2.97	2.32	3.97	.60	3.97
Missouri.....	w	-	-	-	w	851	1.70	-	-	-	3.23	2.49
Montana.....	12,000	w	w	21,134	-	55,882	50.20	31.09	21.80	19.90	-	26.11
New Mexico.....	20,480	w	w	w	w	32,790	9.93	4.82	11.05	4.77	5.78	8.68
North Dakota.....	24,000	-	8,484	-	-	32,484	18.94	-	13.25	-	-	17.36
Ohio.....	15,892	6,087	6,301	2,886	2,525	33,691	3.81	3.91	3.99	3.57	1.32	3.63
Oklahoma.....	700	w	120	w	-	1,981	5.66	2.83	3.39	2.18	-	3.37
Pennsylvania Total.....	67,056	4,158	3,078	4,107	16,112	94,511	4.64	3.69	3.70	2.77	1.29	3.71
Anthracite.....	3,414	418	w	w	1,990	6,827	3.92	5.27	2.09	1.76	.39	1.75
Bituminous.....	63,643	3,740	w	w	14,122	87,684	4.68	3.57	3.91	3.26	1.69	4.01
Tennessee.....	1,243	366	w	w	1,140	4,144	3.51	2.34	4.48	3.30	.67	2.61
Texas.....	46,950	w	-	-	w	54,475	10.10	10.88	-	-	4.88	10.13
Utah.....	7,838	14,900	-	w	w	33,838	7.58	9.05	-	3.37	3.73	6.42
Virginia.....	22,328	9,023	1,907	1,154	4,472	38,884	3.32	3.53	2.78	3.09	.52	2.76
Washington.....	w	-	-	-	-	w	4.71	-	-	-	-	4.71
West Virginia Total.....	119,819	32,614	12,307	5,783	32,877	203,401	5.68	5.15	4.39	4.44	1.48	4.50
Northern.....	37,136	4,195	2,511	1,248	3,666	48,756	5.05	5.85	5.18	4.40	1.74	4.70
Southern.....	82,682	28,419	9,796	4,535	29,211	154,644	6.01	5.06	4.23	4.45	1.45	4.44
Wyoming.....	257,800	25,000	w	w	73,480	379,380	41.06	44.39	56.02	2.44	21.38	39.16
Appalachian Total¹.....	310,854	90,611	39,648	26,645	84,318	552,075	4.60	4.14	3.77	3.07	1.19	3.72
Interior Total¹.....	106,799	41,509	19,118	11,069	14,290	192,784	6.27	5.44	5.42	4.27	1.95	5.46
Western Total¹.....	350,095	66,520	52,732	30,994	90,930	591,271	24.32	13.36	23.12	9.19	10.20	19.37
East of Miss. River.....	369,513	120,543	58,646	37,353	97,268	683,324	4.63	4.28	4.19	3.37	1.26	3.85
West of Miss. River.....	398,235	78,096	52,852	31,354	92,270	652,807	20.60	12.42	22.83	8.85	9.96	17.39
U.S. Total.....	767,748	198,639	111,498	68,707	189,538	1,336,130	7.73	5.79	6.85	4.68	2.13	6.22

¹ For a definition of coal-producing regions, see Appendix C.

w Withheld to avoid disclosure of individual company data.

Notes: Productivity is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations. Excludes office workers. Productive capacity is the maximum amount of coal that can be produced annually as reported by mining companies on Form EIA-7A. Capacity utilization is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons and preparation plants with less than 5,000 employee hours, which are not required to provide data. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 23. Productive Capacity and Capacity Utilization of Coal Mines by State and Recoverable Reserves Range, 1998
(Thousand Short Tons)

Coal-Producing State and Region	Recoverable Reserves Range (million short tons)							
	50 and over		10 to 50		0 to 10		Total	
	Productive Capacity	Capacity Utilization (percent)	Productive Capacity	Capacity Utilization (percent)	Productive Capacity	Capacity Utilization (percent)	Productive Capacity	Capacity Utilization (percent)
Alabama.....	10,326	72.66	9,329	90.19	8,235	85.96	27,891	82.45
Alaska.....	w	w	-	-	-	-	w	w
Arizona.....	w	w	-	-	w	w	w	w
Arkansas.....	-	-	-	-	19	100.00	19	100.00
Colorado.....	21,838	92.62	10,420	58.70	4,400	74.72	36,658	80.83
Illinois.....	13,603	95.06	21,654	81.12	12,367	74.68	47,625	83.43
Indiana.....	-	-	26,336	88.94	15,854	84.30	42,190	87.19
Kansas.....	-	-	-	-	w	w	w	w
Kentucky Total.....	11,649	97.21	34,974	81.53	140,115	78.26	186,737	80.06
Eastern.....	w	w	w	w	117,898	78.99	145,305	79.74
Western.....	w	w	w	w	22,217	74.41	41,433	81.17
Louisiana.....	w	w	w	w	-	-	w	w
Maryland.....	-	-	w	w	w	w	4,250	94.88
Missouri.....	-	-	-	-	851	39.15	851	39.15
Montana.....	w	w	w	w	-	-	55,882	76.66
New Mexico.....	w	w	w	w	450	45.07	32,790	87.21
North Dakota.....	32,484	92.08	-	-	-	-	32,484	92.08
Ohio.....	w	w	w	w	18,978	79.50	33,691	83.13
Oklahoma.....	-	-	w	w	w	w	1,981	83.36
Pennsylvania Total.....	24,360	97.97	27,894	91.35	42,257	73.95	94,511	85.28
Anthracite.....	-	-	w	w	w	w	6,827	73.57
Bituminous.....	24,360	97.97	w	w	w	w	87,684	86.19
Tennessee.....	-	-	-	-	w	w	4,144	64.52
Texas.....	39,220	97.05	w	w	w	w	54,475	96.53
Utah.....	w	w	13,585	85.63	w	w	33,838	77.06
Virginia.....	-	-	7,679	94.63	31,205	84.24	38,884	86.29
Washington.....	-	-	w	w	w	w	w	w
West Virginia Total.....	31,421	95.59	61,826	85.23	110,154	80.13	203,401	84.07
Northern.....	22,409	97.85	11,776	88.69	14,571	83.66	48,756	91.39
Southern.....	9,011	89.99	50,050	84.42	95,583	79.59	154,644	81.76
Wyoming.....	356,700	83.65	-	-	22,680	70.59	379,380	82.87
Appalachian Total¹.....	72,073	92.43	146,207	87.29	333,795	79.23	552,075	83.09
Interior Total¹.....	66,022	96.02	65,476	86.01	61,286	79.27	192,784	87.30
Western Total¹.....	517,836	83.81	39,936	75.97	33,499	72.88	591,271	82.66
East of Miss. River.....	96,125	93.32	202,965	86.49	384,234	79.02	683,324	83.25
West of Miss. River.....	559,806	84.73	48,654	79.60	44,346	76.36	652,807	83.78
U.S. Total.....	655,931	85.99	251,619	85.16	428,580	78.74	1,336,130	83.51

¹ For a definition of coal-producing regions, see Appendix C.

^w Withheld to avoid disclosure of individual company data.

Notes: Recoverable reserves represent the quantity of coal that can be recovered (i.e., mined) from existing coal reserves at reporting mines. Productive capacity is the maximum amount of coal that can be produced annually as reported by mining companies on Form EIA-7A. Capacity utilization is the ratio of total production to productive capacity as reported by mining companies on Form EIA-7A. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 24. Productive Capacity and Capacity Utilization of Coal Mines by State, Mine Type, and Union Type, 1998
(Thousand Short Tons)

Coal-Producing State and Region	UMWA		Other Unions		Nonunion		Total	
	Productive Capacity	Capacity Utilization (percent)						
Alabama	19,436	82.58	—	—	8,454	82.15	27,891	82.45
Underground.....	w	w	—	—	w	w	21,156	81.85
Surface.....	w	w	—	—	w	w	6,735	84.34
Alaska	—	—	w	w	—	—	w	w
Surface.....	—	—	w	w	—	—	w	w
Arizona	w	w	—	—	—	—	w	w
Surface.....	w	w	—	—	—	—	w	w
Arkansas	—	—	—	—	w	w	w	w
Surface.....	—	—	—	—	w	w	w	w
Colorado	w	w	w	w	27,158	87.70	36,658	80.83
Underground.....	w	w	—	—	w	w	26,331	74.84
Surface.....	w	w	w	w	w	w	10,328	96.11
Illinois	28,034	81.26	w	w	w	w	47,625	83.43
Underground.....	24,214	86.59	w	w	w	w	40,073	87.97
Surface.....	3,820	47.49	w	w	w	w	7,552	59.34
Indiana	13,726	90.90	—	—	28,464	85.41	42,190	87.19
Underground.....	w	w	—	—	w	w	w	w
Surface.....	w	w	—	—	w	w	w	w
Kansas	—	—	—	—	w	w	w	w
Surface.....	—	—	—	—	w	w	w	w
Kentucky Total	w	w	w	w	166,172	81.91	186,737	80.06
Underground.....	w	w	w	w	95,711	85.34	112,829	81.69
Surface.....	w	w	w	w	70,461	77.25	73,908	77.57
Eastern	w	w	w	w	136,785	81.95	145,305	79.74
Underground.....	w	w	w	w	w	w	83,056	79.94
Surface.....	w	w	w	w	w	w	62,248	79.47
Western	w	w	—	—	29,387	81.70	41,433	81.17
Underground.....	w	w	—	—	w	w	29,773	86.55
Surface.....	w	w	—	—	w	w	11,660	67.45
Louisiana	—	—	—	—	w	w	w	w
Surface.....	—	—	—	—	w	w	w	w
Maryland	—	—	—	—	4,250	94.88	4,250	94.88
Underground.....	—	—	—	—	w	w	w	w
Surface.....	—	—	—	—	w	w	w	w
Missouri	—	—	—	—	851	39.15	851	39.15
Surface.....	—	—	—	—	851	39.15	851	39.15
Montana	19,800	70.52	w	w	w	w	55,882	76.66
Surface.....	19,800	70.52	w	w	w	w	w	w
New Mexico	w	w	w	w	w	w	32,790	87.21
Underground.....	—	—	—	—	w	w	w	w
Surface.....	w	w	w	w	w	w	w	w
North Dakota	w	w	w	w	w	w	32,484	92.08
Surface.....	w	w	w	w	w	w	32,484	92.08
Ohio	16,127	91.26	—	—	17,564	75.66	33,691	83.13
Underground.....	12,992	94.67	—	—	2,940	78.37	15,932	91.66
Surface.....	3,135	77.13	—	—	14,624	75.11	17,759	75.47
Oklahoma	—	—	—	—	1,981	83.36	1,981	83.36
Underground.....	—	—	—	—	w	w	w	w
Surface.....	—	—	—	—	w	w	w	w
Pennsylvania Total	w	w	w	w	54,589	80.36	94,511	85.28
Underground.....	w	w	—	—	w	w	66,763	89.08
Surface.....	w	w	w	w	w	w	27,748	76.12
Anthracite	w	w	w	w	4,293	82.02	6,827	73.57
Underground.....	—	—	—	—	w	w	567	60.37
Surface.....	w	w	w	w	w	w	6,260	74.77
Bituminous	37,387	94.22	—	—	50,297	80.22	87,684	86.19
Underground.....	35,412	96.30	—	—	30,784	81.30	66,196	89.33
Surface.....	1,975	56.92	—	—	19,512	78.50	21,487	76.51
Tennessee	—	—	—	—	4,144	64.52	4,144	64.52
Underground.....	—	—	—	—	w	w	w	w
Surface.....	—	—	—	—	w	w	w	w
Texas	—	—	27,879	98.38	26,596	94.59	54,475	96.53
Surface.....	—	—	27,879	98.38	26,596	94.59	54,475	96.53
Utah	w	w	—	—	w	w	33,838	77.06
Underground.....	w	w	—	—	w	w	33,838	77.06
Virginia	w	w	w	w	31,099	84.97	38,884	86.29
Underground.....	w	w	897	88.18	w	w	27,606	90.77
Surface.....	w	w	w	w	w	w	11,278	75.33

See footnotes at end of table.

Table 24. Productive Capacity and Capacity Utilization of Coal Mines by State, Mine Type, and Union Type, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State and Region	UMWA		Other Unions		Nonunion		Total	
	Productive Capacity	Capacity Utilization (percent)						
Washington	–	–	w	w	w	w	w	w
Surface	–	–	w	w	w	w	w	w
West Virginia Total	91,739	87.14	–	–	111,662	81.54	203,401	84.07
Underground	66,737	88.87	–	–	67,181	86.01	133,918	87.44
Surface	25,002	82.51	–	–	44,481	74.79	69,483	77.57
Northern	30,532	97.54	–	–	18,224	81.10	48,756	91.39
Underground	30,532	97.54	–	–	11,125	84.85	41,656	94.15
Surface	–	–	–	–	7,100	75.22	7,100	75.22
Southern	61,207	81.95	–	–	93,438	81.63	154,644	81.76
Underground	36,205	81.56	–	–	56,056	86.25	92,261	84.41
Surface	25,002	82.51	–	–	37,381	74.71	62,383	77.84
Wyoming	w	w	w	w	363,530	82.30	379,380	82.87
Underground	–	–	–	–	w	w	w	w
Surface	w	w	w	w	w	w	w	w
Appalachian Total¹	181,889	86.25	1,639	88.28	368,547	81.50	552,075	83.09
Underground	w	w	w	w	208,594	84.65	353,830	86.01
Surface	w	w	w	w	159,953	77.40	198,246	77.88
Interior Total¹	53,806	83.41	31,794	95.72	107,185	86.75	192,784	87.30
Underground	w	w	w	w	35,865	90.61	74,035	87.40
Surface	w	w	w	w	71,319	84.80	118,749	87.23
Western Total¹	66,384	78.74	66,046	82.35	458,840	83.27	591,271	82.66
Underground	13,600	65.60	–	–	50,699	76.50	64,299	74.19
Surface	52,784	82.12	66,046	82.35	408,142	84.12	526,972	83.69
East of Miss. River	235,695	85.60	5,554	80.20	442,074	82.03	683,324	83.25
Underground	179,972	87.19	3,434	88.51	244,099	85.55	427,505	86.26
Surface	55,723	80.49	2,121	66.75	197,975	77.70	255,819	78.21
West of Miss. River	66,384	78.74	93,925	87.11	492,498	83.82	652,807	83.78
Underground	13,600	65.60	–	–	51,059	76.44	64,659	74.16
Surface	52,784	82.12	93,925	87.11	441,439	84.67	588,148	84.83
U.S. Total	302,079	84.09	99,479	86.72	934,572	82.97	1,336,130	83.51
Underground	193,572	85.67	3,434	88.51	295,158	83.97	492,164	84.67
Surface	108,507	81.28	96,046	86.66	639,414	82.51	843,967	82.83

¹ For a definition of coal-producing regions, see Appendix C.

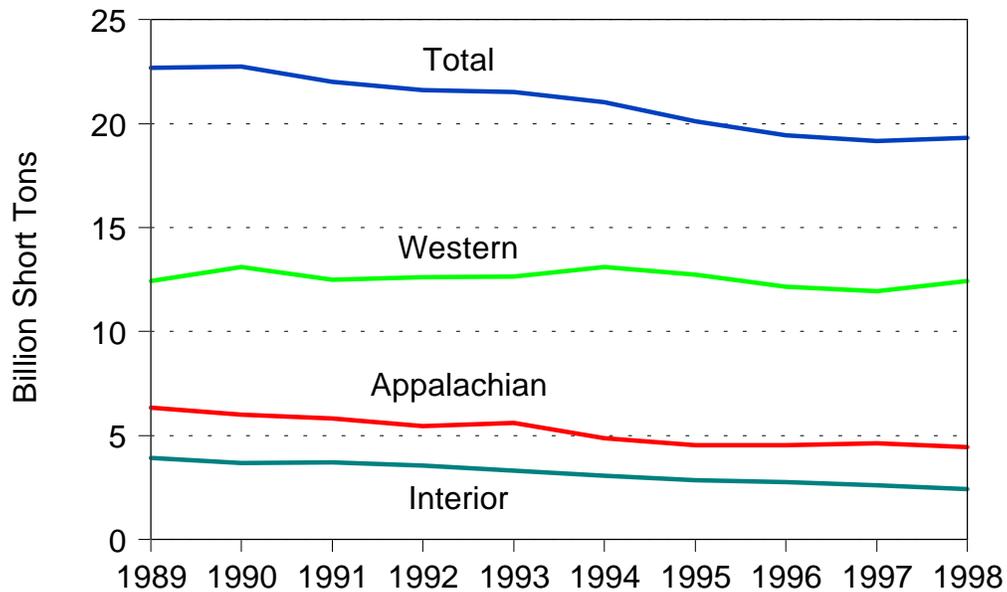
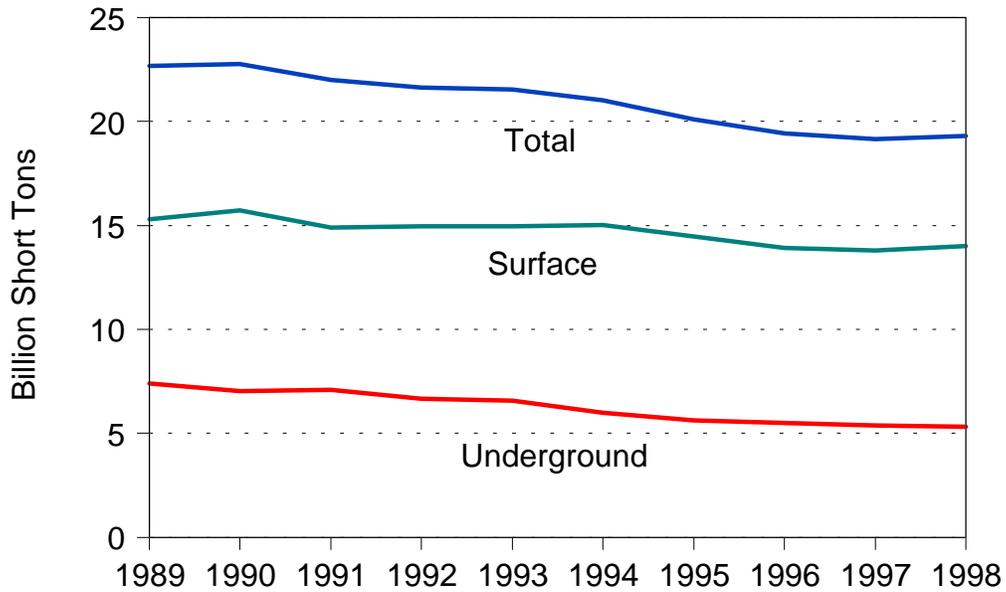
^w Withheld to avoid disclosure of individual company data.

Notes: Productive capacity is the maximum amount of coal that can be produced annually as reported by mining companies on Form EIA-7A. Capacity utilization is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data. Totals may not equal sum of components due to independent rounding. See Glossary for listing of other unions.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

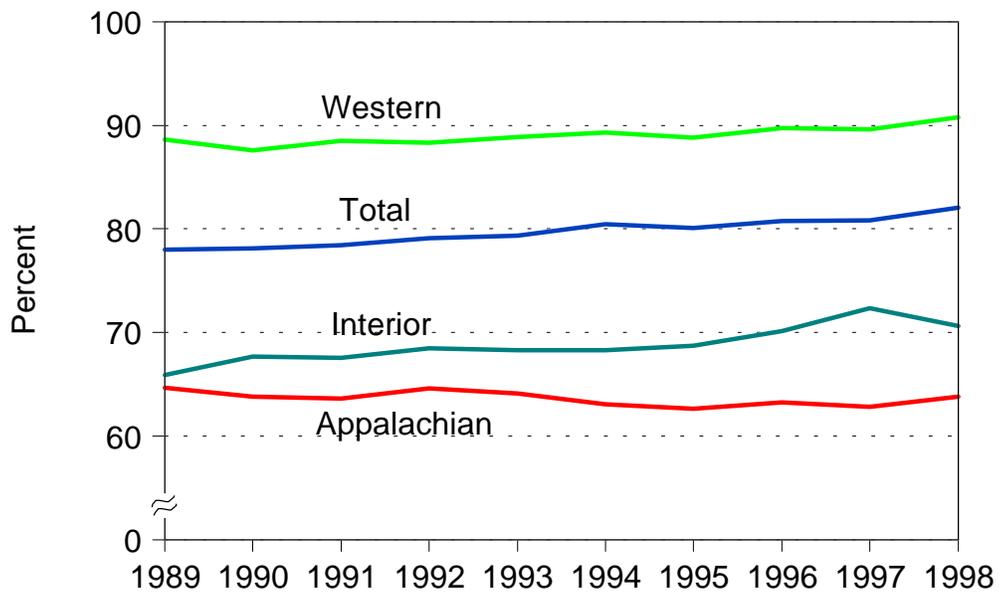
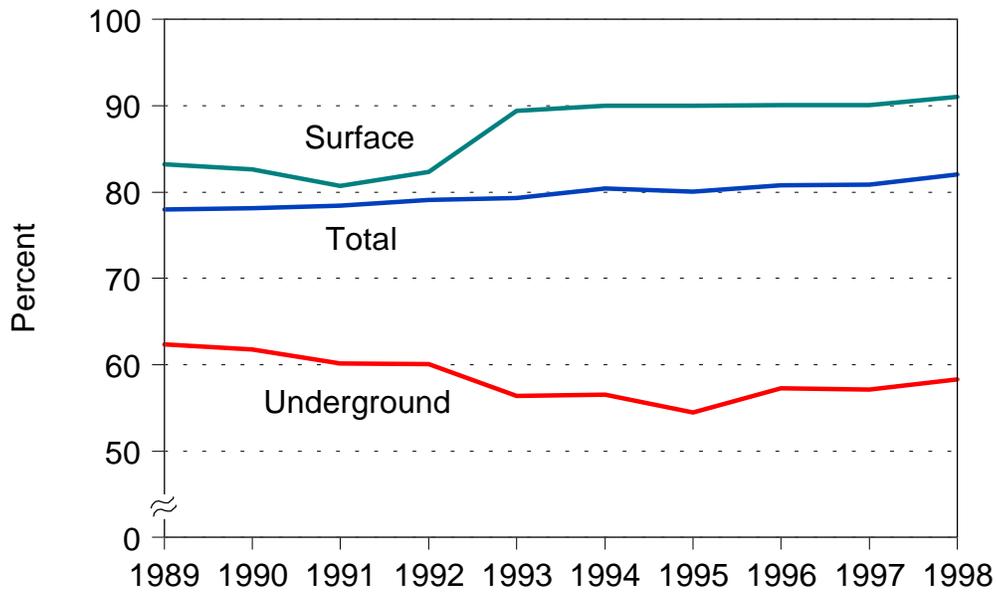
Recoverable Coal Reserves at Producing Mines

Figure 1. Recoverable Coal Reserves at Producing U.S. Mines by Mine Type and by Region, 1989-1998



Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report"; State Mining Agency Coal Production Reports and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Figure 2. Average Recovery Percentage at Producing U.S. Mines by Mine Type and by Region, 1989-1998



Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report"; State Mining Agency Coal Production Reports and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 25. Recoverable Coal Reserves at Producing Mines by State, 1989, 1994-1998

(Million Short Tons)

Coal-Producing State and Region	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Alabama.....	374	374	452	510	457	508	-0.2	-4.9	-3.3
Alaska.....	w	w	w	w	w	w	w	w	w
Arizona.....	w	w	w	w	w	w	w	w	w
Arkansas.....	-	-	-	w	w	w	-	-	-
California.....	-	-	-	-	-	w	-	-	-
Colorado.....	540	568	642	692	676	662	-4.8	-5.5	-2.2
Illinois.....	744	745	891	882	963	1,381	-1	-6.3	-6.6
Indiana.....	313	393	386	324	304	475	-20.3	.7	-4.5
Iowa.....	-	-	-	-	w	w	-	-	-
Kansas.....	w	w	w	w	w	w	w	w	w
Kentucky Total.....	1,175	1,331	1,255	1,279	1,365	1,513	-11.7	-3.7	-2.8
Eastern.....	755	965	818	763	809	933	-21.8	-1.7	-2.3
Western.....	421	366	437	516	556	580	14.9	-6.8	-3.5
Louisiana.....	w	w	w	w	w	w	w	w	w
Maryland.....	64	68	71	58	89	87	-5.1	-7.7	-3.3
Missouri.....	3	1	3	2	12	w	187.8	-29.8	w
Montana.....	1,191	1,168	1,309	1,251	1,283	1,514	2.0	-1.8	-2.6
New Mexico.....	1,385	1,415	1,436	1,480	1,458	1,411	-2.1	-1.3	-2
North Dakota.....	1,170	1,211	1,301	1,668	1,695	1,361	-3.4	-8.8	-1.7
Ohio.....	356	318	415	468	479	815	11.8	-7.1	-8.8
Oklahoma.....	18	24	19	19	43	24	-22.8	-19.3	-2.9
Pennsylvania Total.....	775	905	796	737	913	1,184	-14.4	-4.0	-4.6
Anthracite.....	88	120	90	49	38	60	-27.0	23.4	4.3
Bituminous.....	687	785	706	687	875	1,124	-12.5	-5.9	-5.3
Tennessee.....	27	57	59	68	42	72	-52.5	-10.5	-10.3
Texas.....	791	922	878	940	1,026	1,135	-14.2	-6.3	-3.9
Utah.....	433	433	284	375	423	519	.1	.6	-2.0
Virginia.....	187	208	188	203	237	420	-10.1	-5.7	-8.6
Washington.....	w	w	w	w	w	w	w	w	w
West Virginia Total.....	1,908	1,737	1,731	1,731	1,830	2,313	9.8	1.0	-2.1
Northern.....	857	714	741	782	861	1,183	19.9	-.1	-3.5
Southern.....	1,051	1,023	990	949	969	1,131	2.8	2.1	-.8
Wyoming.....	7,220	6,465	6,591	6,724	6,999	6,288	11.7	.8	1.5
Appalachian Total¹.....	4,445	4,632	4,530	4,538	4,855	6,331	-4.0	-2.2	-3.8
Interior Total¹.....	2,428	2,591	2,757	2,835	3,069	3,907	-6.3	-5.7	-5.1
Western Total¹.....	12,438	11,941	12,141	12,732	13,093	12,442	4.2	-1.3	*
East of Miss. River.....	5,923	6,136	6,244	6,260	6,679	8,767	-3.5	-3.0	-4.3
West of Miss. River.....	13,389	13,029	13,184	13,845	14,337	13,913	2.8	-1.7	-4
U.S. Total.....	19,311	19,164	19,428	20,105	21,017	22,680	.8	-2.1	-1.8

¹ For a definition of coal-producing regions, see Appendix C.

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

Notes: Recoverable reserves represent the quantity of coal that can be recovered (i.e., mined) from existing coal reserves at reporting mines. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report"; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 26. Average Recovery Percentage at Producing Coal Mines by State, 1989, 1994-1998

Coal-Producing State and Region	1998	1997	1996	1995	1994	1989
Alabama.....	54.15	54.81	55.56	58.74	60.20	62.84
Alaska.....	w	w	w	w	w	w
Arizona.....	w	w	w	w	w	w
Arkansas.....	-	-	-	w	w	w
California.....	-	-	-	-	-	w
Colorado.....	81.40	80.43	79.12	66.06	77.12	67.16
Illinois.....	53.48	53.49	54.20	52.05	52.92	49.37
Indiana.....	76.46	76.35	78.85	76.23	72.75	71.23
Iowa.....	-	-	-	-	w	w
Kansas.....	w	w	w	w	w	w
Kentucky Total.....	59.89	60.91	58.99	57.71	59.45	64.81
Eastern.....	62.45	63.14	62.59	60.87	62.60	68.19
Western.....	55.29	55.02	52.27	53.03	54.86	59.39
Louisiana.....	w	w	w	w	w	w
Maryland.....	60.39	57.36	61.45	58.34	55.50	71.53
Missouri.....	87.46	60.73	59.87	61.04	81.48	w
Montana.....	90.98	90.27	89.05	90.38	90.51	89.97
New Mexico.....	93.43	93.42	93.35	92.62	92.42	93.66
North Dakota.....	88.38	89.84	89.72	89.58	89.84	90.04
Ohio.....	70.78	63.89	71.61	68.73	67.81	69.34
Oklahoma.....	66.01	69.34	65.94	62.39	63.89	86.63
Pennsylvania Total.....	64.29	65.17	65.59	65.26	68.23	68.30
Anthracite.....	54.61	47.72	59.90	64.39	65.06	50.76
Bituminous.....	65.53	67.85	66.32	65.32	68.37	69.24
Tennessee.....	71.35	68.23	63.33	64.14	65.18	65.64
Texas.....	89.55	90.47	88.32	87.09	86.10	81.38
Utah.....	52.14	49.47	45.61	46.10	46.10	54.09
Virginia.....	58.41	58.58	54.81	58.14	58.37	65.64
Washington.....	w	w	w	w	w	w
West Virginia Total.....	65.33	63.58	63.49	62.44	61.10	59.69
Northern.....	66.34	58.54	58.91	55.10	53.06	50.62
Southern.....	64.50	67.10	66.92	68.49	68.24	69.17
Wyoming.....	93.80	92.26	92.16	92.27	92.98	92.10
Appalachian Total¹.....	63.83	62.85	63.25	62.65	63.07	64.67
Interior Total¹.....	70.64	72.36	70.15	68.71	68.29	65.91
Western Total¹.....	90.79	89.63	89.74	88.81	89.72	88.59
East of Miss. River.....	62.59	62.11	62.16	61.06	61.36	62.27
West of Miss. River.....	90.66	89.64	89.60	88.66	89.32	87.92
U.S. Total.....	82.05	80.83	80.78	80.07	80.43	78.00

¹ For a definition of coal-producing regions, see Appendix C.

^w Withheld to avoid disclosure of individual company data.

Notes: Average recovery percentage represents the percentage of coal that can be recovered from coal reserves at reporting mines, weighted for all mines in the geographic area. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report"; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 27. Recoverable Coal Reserves and Average Recovery Percentage at Producing Mines by State and Mine Type, 1998
(Million Short Tons)

Coal-Producing State and Region	Underground		Surface		Total	
	Recoverable Coal Reserves	Average Recovery Percentage	Recoverable Coal Reserves	Average Recovery Percentage	Recoverable Coal Reserves	Average Recovery Percentage
Alabama	334	52.71	40	66.23	374	54.15
Alaska.....	—	—	w	w	w	w
Arizona.....	—	—	w	w	w	w
Colorado.....	329	78.28	211	86.25	540	81.40
Illinois.....	710	53.32	34	56.80	744	53.48
Indiana.....	w	w	w	w	313	76.46
Kansas.....	—	—	w	w	w	w
Kentucky Total.....	911	53.41	265	82.20	1,175	59.89
Eastern.....	526	54.58	229	80.53	755	62.45
Western.....	385	51.81	36	92.95	421	55.29
Louisiana.....	—	—	w	w	w	w
Maryland.....	w	w	w	w	64	60.39
Missouri.....	—	—	3	87.46	3	87.46
Montana.....	—	—	1,191	90.98	1,191	90.98
New Mexico.....	w	w	w	w	1,385	93.43
North Dakota.....	—	—	1,170	88.38	1,170	88.38
Ohio.....	194	57.79	162	86.27	356	70.78
Oklahoma.....	w	w	w	w	18	66.01
Pennsylvania Total.....	622	63.15	153	68.93	775	64.29
Anthracite.....	23	75.50	65	47.25	88	54.61
Bituminous.....	599	62.68	88	84.98	687	65.53
Tennessee.....	w	w	w	w	27	71.35
Texas.....	—	—	791	89.55	791	89.55
Utah.....	433	52.14	—	—	433	52.14
Virginia.....	159	53.68	27	85.90	187	58.41
Washington.....	—	—	w	w	w	w
West Virginia Total.....	1,493	61.06	415	80.70	1,908	65.33
Northern.....	825	66.02	32	74.69	857	66.34
Southern.....	668	54.93	383	81.20	1,051	64.50
Wyoming.....	w	w	w	w	7,220	93.80
Appalachian Total¹.....	3,403	59.06	1,042	79.41	4,445	63.83
Interior Total¹.....	1,140	52.75	1,288	86.47	2,428	70.64
Western Total¹.....	766	63.41	11,672	92.58	12,438	90.79
East of Miss. River.....	4,529	57.47	1,394	79.23	5,923	62.59
West of Miss. River.....	779	63.33	12,609	92.34	13,389	90.66
U.S. Total.....	5,309	58.33	14,003	91.04	19,311	82.05

¹ For a definition of coal-producing regions, see Appendix C.

^w Withheld to avoid disclosure of individual company data.

Notes: Recoverable reserves represent the quantity of coal that can be recovered (i.e., mined) from existing coal reserves at reporting mines. Average recovery percentage represents the percentage of coal that can be recovered from coal reserves at reporting mines, weighted for all mines in the reported geographic area. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 28. Recoverable Coal Reserves at Producing Underground Mines by State and Mining Method, 1998
(Million Short Tons)

Coal-Producing State and Region	Continuous ¹	Conventional ²	Longwall ³	Other ⁴	Total
Alabama.....	31	-	235	68	334
Colorado.....	36	-	293	-	329
Illinois.....	360	-	349	-	710
Indiana.....	w	-	-	-	w
Kentucky Total.....	816	w	78	w	911
Eastern.....	504	w	6	w	526
Western.....	313	-	72	-	385
Maryland.....	w	-	w	-	w
New Mexico.....	w	-	-	-	w
Ohio.....	25	-	169	-	194
Oklahoma.....	w	-	-	-	w
Pennsylvania Total.....	179	w	409	w	622
Anthracite.....	w	w	-	w	23
Bituminous.....	w	w	409	-	599
Tennessee.....	w	-	-	-	w
Utah.....	w	w	324	-	433
Virginia.....	93	w	w	-	159
West Virginia Total.....	875	10	608	-	1,493
Northern.....	360	3	461	-	825
Southern.....	514	7	147	-	668
Wyoming.....	-	w	w	-	w
Appalachian Total⁵.....	1,735	w	w	89	3,403
Interior Total⁵.....	w	-	w	-	1,140
Western Total⁵.....	w	w	w	-	766
East of Miss. River.....	2,439	w	w	89	4,529
West of Miss. River.....	155	w	w	-	779
U.S. Total.....	2,594	56	2,569	89	5,309

¹ Mines that produce greater than 50 percent of coal by continuous mining method.

² Mines that produce greater than 50 percent of coal by conventional mining method, or mines that produce less than 10,000 short tons, which are not required to provide data.

³ Mines that have any production from longwall mining method. A typical longwall mining operation uses 80 percent longwall mining and 20 percent continuous mining.

⁴ Mines that produce coal using shortwall, scoop loading, hand loading, or other mining methods or a 50/50 percent continuous/conventional split in mining method.

⁵ For a definition of coal-producing regions, see Appendix C.

w Withheld to avoid disclosure of individual company data.

Notes: Recoverable reserves represent the quantity of coal that can be recovered (i.e., mined) from existing coal reserves at reporting mines. Excludes mines producing less than 10,000 short tons, which are not required to provide data. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 29. Average Recovery Percentage at Producing Underground Coal Mines by State and Mining Method, 1998

Coal-Producing State and Region	Continuous ¹	Conventional ²	Longwall ³	Other ⁴	Total
Alabama.....	44.05	—	53.47	54.00	52.71
Colorado.....	49.81	—	81.76	—	78.28
Illinois.....	50.79	—	55.93	—	53.32
Indiana.....	w	—	—	—	w
Kentucky Total.....	52.83	w	57.58	w	53.41
Eastern.....	54.27	w	59.36	w	54.58
Western.....	50.50	—	57.44	—	51.81
Maryland.....	w	—	w	—	w
New Mexico.....	w	—	—	—	w
Ohio.....	50.78	—	58.83	—	57.79
Oklahoma.....	w	—	—	—	w
Pennsylvania Total.....	62.93	w	62.38	w	63.15
Anthracite.....	w	w	—	w	75.50
Bituminous.....	w	w	62.38	—	62.68
Tennessee.....	w	—	—	—	w
Utah.....	w	w	49.27	—	52.14
Virginia.....	61.61	w	w	—	53.68
West Virginia Total.....	63.01	51.14	58.41	—	61.06
Northern.....	76.95	67.00	57.48	—	66.02
Southern.....	53.25	43.94	61.34	—	54.93
Wyoming.....	—	w	w	—	w
Appalachian Total⁵.....	59.87	w	w	58.84	59.06
Interior Total⁵.....	w	—	w	—	52.75
Western Total⁵.....	58.37	w	w	—	63.41
East of Miss. River.....	57.18	w	w	58.84	57.47
West of Miss. River.....	58.42	w	w	—	63.33
U.S. Total.....	57.26	59.58	59.37	58.84	58.33

¹ Mines that produce greater than 50 percent of coal by continuous mining method.

² Mines that produce greater than 50 percent of coal by conventional mining method, or mines that produce less than 10,000 short tons, which are not required to provide data.

³ Mines that have any production from longwall mining method. A typical longwall mining operation uses 80 percent longwall mining and 20 percent continuous mining.

⁴ Mines that produce coal using shortwall, scoop loading, hand loading, or other mining methods or a 50/50 percent continuous/conventional split in mining method.

⁵ For a definition of coal-producing regions, see Appendix C.

w Withheld to avoid disclosure of individual company data.

Notes: Average recovery percentage represents the percentage of coal that can be recovered from coal reserves at reporting mines, weighted for all mines in the reported geographic area. Excludes mines producing less than 10,000 short tons, which are not required to provide data.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 30. Recoverable Coal Reserves and Average Recovery Percentage at Producing U.S. Mines by Mine Production Range and Mine Type, 1998
(Million Short Tons)

Mine Production Range (thousand short tons)	Underground		Surface		Total	
	Recoverable Coal Reserves	Average Recovery Percentage	Recoverable Coal Reserves	Average Recovery Percentage	Recoverable Coal Reserves	Average Recovery Percentage
Over 1,000.....	3,623	57.48	12,685	91.75	16,307	84.14
500 to 1,000	481	54.48	542	88.45	1,024	72.47
200 to 500	353	53.76	226	80.08	579	64.03
100 to 200	570	70.04	100	79.58	669	71.46
50 to 100	141	55.24	83	57.52	223	56.08
10 to 50	141	60.62	368	87.78	509	80.24
U.S. Total.....	5,309	58.33	14,003	91.04	19,311	82.05

Notes: Recoverable reserves represent the quantity of coal that can be recovered (i.e., mined) from existing coal reserves at reporting mines. Average recovery percentage represents the percentage of coal that can be recovered from coal reserves at reporting mines, weighted for all mines in the reported geographic area. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 31. Recoverable Coal Reserves and Average Recovery Percentage at Producing U.S. Mines by Coalbed Thickness and Mine Type, 1998
(Million Short Tons)

Coalbed Thickness (inches)	Underground		Surface		Total	
	Recoverable Coal Reserves	Average Recovery Percentage	Recoverable Coal Reserves	Average Recovery Percentage	Recoverable Coal Reserves	Average Recovery Percentage
< 7	—	—	*	85.62	*	85.62
7-12	8	60.00	48	71.30	57	69.61
13-18	—	—	42	86.51	42	86.51
19-24	2	54.14	121	82.58	123	82.23
25-30	42	56.43	220	88.24	263	83.13
31-36	204	55.29	191	83.90	395	69.12
37-42	323	57.81	174	83.15	497	66.66
43-48	674	58.11	242	82.42	916	64.54
49-54	366	53.85	499	88.90	865	74.07
55-60	417	54.24	113	80.51	530	59.85
61-66	325	59.36	224	89.14	549	71.51
67-72	1,075	61.50	319	84.11	1,395	66.68
73-78	502	56.64	131	89.43	633	63.42
79-84	407	52.37	441	92.35	848	73.17
85-90	112	52.46	237	85.22	349	74.71
91-96	268	60.49	29	85.90	297	63.00
97-102	22	82.00	451	94.53	473	93.94
103-108	31	63.00	141	83.73	172	79.97
109-114	163	50.33	21	87.70	185	54.66
115-120	45	53.22	10	74.22	55	56.92
> 120	322	73.34	10,347	92.33	10,669	91.76
U.S. Total.....	5,309	58.33	14,003	91.04	19,311	82.05

* Data round to zero.

Notes: Recoverable reserves represent the quantity of coal that can be recovered (i.e., mined) from existing coal reserves at reporting mines. Average recovery percentage represents the percentage of coal that can be recovered from coal reserves at reporting mines, weighted for all mines in the reported geographic area. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 32. Recoverable Coal Reserves and Average Recovery Percentage at Producing Mines by State, Mine Type, and Union Type, 1998
(Million Short Tons)

Coal-Producing State and Region	UMWA		Other Unions		Nonunion		Total	
	Recoverable Coal Reserves	Average Recovery Percentage						
Alabama	273	54.68	-	-	101	52.72	374	54.15
Underground.....	w	w	-	-	w	w	334	52.71
Surface.....	w	w	-	-	w	w	40	66.23
Alaska	-	-	w	w	-	-	w	w
Surface.....	-	-	w	w	-	-	w	w
Arizona	w	w	-	-	-	-	w	w
Surface.....	w	w	-	-	-	-	w	w
Colorado	w	w	w	w	471	80.48	540	81.40
Underground.....	w	w	-	-	w	w	329	78.28
Surface.....	w	w	w	w	w	w	211	86.25
Illinois	280	48.79	w	w	w	w	744	53.48
Underground.....	272	47.87	w	w	w	w	710	53.32
Surface.....	8	80.00	w	w	w	w	34	56.80
Indiana	126	77.45	-	-	188	75.81	313	76.46
Underground.....	w	w	-	-	w	w	w	w
Surface.....	w	w	-	-	w	w	w	w
Kansas	-	-	-	-	w	w	w	w
Surface.....	-	-	-	-	w	w	w	w
Kentucky Total	w	w	w	w	1,089	59.21	1,175	59.89
Underground.....	w	w	w	w	867	52.75	911	53.41
Surface.....	w	w	w	w	222	84.43	265	82.20
Eastern	w	w	w	w	708	62.20	755	62.45
Underground.....	w	w	w	w	w	w	526	54.58
Surface.....	w	w	w	w	w	w	229	80.53
Western	w	w	-	-	381	53.65	421	55.29
Underground.....	w	w	-	-	w	w	385	51.81
Surface.....	w	w	-	-	w	w	36	92.95
Louisiana	-	-	-	-	w	w	w	w
Surface.....	-	-	-	-	w	w	w	w
Maryland	-	-	-	-	64	60.39	64	60.39
Underground.....	-	-	-	-	w	w	w	w
Surface.....	-	-	-	-	w	w	w	w
Missouri	-	-	-	-	3	87.46	3	87.46
Surface.....	-	-	-	-	3	87.46	3	87.46
Montana	131	87.79	w	w	w	w	1,191	90.98
Surface.....	131	87.79	w	w	w	w	w	w
New Mexico	w	w	w	w	w	w	1,385	93.43
Underground.....	-	-	-	-	w	w	w	w
Surface.....	w	w	w	w	w	w	w	w
North Dakota	w	w	w	w	w	w	1,170	88.38
Surface.....	w	w	w	w	w	w	1,170	88.38
Ohio	243	68.89	-	-	113	74.81	356	70.78
Underground.....	169	58.83	-	-	25	50.78	194	57.79
Surface.....	74	91.84	-	-	88	81.60	162	86.27
Oklahoma	-	-	-	-	18	66.01	18	66.01
Underground.....	-	-	-	-	w	w	w	w
Surface.....	-	-	-	-	w	w	w	w
Pennsylvania Total	w	w	w	w	386	70.71	775	64.29
Underground.....	w	w	-	-	w	w	622	63.15
Surface.....	w	w	w	w	w	w	153	68.93
Anthracite	w	w	w	w	38	75.26	88	54.61
Underground.....	-	-	-	-	w	w	23	75.50
Surface.....	w	w	w	w	w	w	65	47.25
Bituminous	339	60.71	-	-	348	70.22	687	65.53
Underground.....	324	59.81	-	-	276	66.05	599	62.68
Surface.....	15	79.93	-	-	73	86.04	88	84.98
Tennessee	-	-	-	-	27	71.35	27	71.35
Underground.....	-	-	-	-	w	w	w	w
Surface.....	-	-	-	-	w	w	w	w
Texas	-	-	395	90.47	396	88.63	791	89.55
Surface.....	-	-	395	90.47	396	88.63	791	89.55
Utah	w	w	-	-	w	w	433	52.14
Underground.....	w	w	-	-	w	w	433	52.14
Virginia	w	w	w	w	135	61.65	187	58.41
Underground.....	w	w	7	65.00	w	w	159	53.68
Surface.....	w	w	w	w	w	w	27	85.90

See footnotes at end of table.

Table 32. Recoverable Coal Reserves and Average Recovery Percentage at Producing Mines by State, Mine Type, and Union Type, 1998 (Continued)
(Million Short Tons)

Coal-Producing State and Region	UMWA		Other Unions		Nonunion		Total	
	Recoverable Coal Reserves	Average Recovery Percentage						
Washington	–	–	w	w	w	w	w	w
Surface	–	–	w	w	w	w	w	w
West Virginia Total	880	63.22	–	–	1,028	67.13	1,908	65.33
Underground	725	58.47	–	–	768	63.50	1,493	61.06
Surface	155	85.53	–	–	260	77.84	415	80.70
Northern	467	57.76	–	–	389	76.64	857	66.34
Underground	467	57.76	–	–	358	76.81	825	66.02
Surface	–	–	–	–	32	74.69	32	74.69
Southern	413	69.41	–	–	639	61.33	1,051	64.50
Underground	258	59.75	–	–	410	51.91	668	54.93
Surface	155	85.53	–	–	228	78.27	383	81.20
Wyoming	w	w	w	w	6,928	93.93	7,220	93.80
Underground	–	–	–	–	w	w	w	w
Surface	w	w	w	w	w	w	w	w
Appalachian Total ¹	1,874	61.30	9	69.19	2,562	65.66	4,445	63.83
Underground	w	w	w	w	1,865	60.30	3,403	59.06
Surface	w	w	w	w	697	80.01	1,042	79.41
Interior Total ¹	445	58.85	424	89.17	1,560	68.97	2,428	70.64
Underground	w	w	w	w	816	53.44	1,140	52.75
Surface	w	w	w	w	744	85.98	1,288	86.47
Western Total ¹	936	86.29	2,380	91.40	9,122	91.09	12,438	90.79
Underground	82	53.40	–	–	684	64.61	766	63.41
Surface	853	89.46	2,380	91.40	8,438	93.23	11,672	92.58
East of Miss. River	2,319	60.83	37	70.80	3,566	63.65	5,923	62.59
Underground	1,839	56.30	23	65.00	2,667	58.21	4,529	57.47
Surface	480	78.16	14	80.20	899	79.79	1,394	79.23
West of Miss. River	936	86.29	2,775	91.26	9,678	90.90	13,389	90.66
Underground	82	53.40	–	–	697	64.50	779	63.33
Surface	853	89.46	2,775	91.26	8,980	92.95	12,609	92.34
U.S. Total	3,255	68.15	2,813	90.99	13,244	83.57	19,311	82.05
Underground	1,921	56.18	23	65.00	3,364	59.52	5,309	58.33
Surface	1,333	85.39	2,790	91.21	9,880	91.75	14,003	91.04

¹ For a definition of coal-producing regions, see Appendix C.

^w Withheld to avoid disclosure of individual company data.

Notes: Recoverable reserves represent the quantity of coal that can be recovered (i.e., mined) from existing coal reserves at reporting mines. Average recovery percentage represents the percentage of coal that can be recovered from coal reserves at reporting mines, weighted for all mines in the reported geographic area. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data. Totals may not equal sum of components due to independent rounding. See Glossary for listing of other unions.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 33. U.S. Demonstrated Reserve Base of Coal by Potential Mining Method and Ranked by State Total, January 1, 1997
(Million Short Tons)

Rank	State	Underground	Surface	Total
1	Montana	70,958	48,718	119,677
2	Illinois	88,461	16,608	105,069
3	Wyoming	42,516	25,299	67,815
4	West Virginia	30,968	4,429	35,397
5	Kentucky	18,508	13,533	32,041
6	Pennsylvania	24,232	4,414	28,646
	Anthracite	3,850	3,370	7,220
	Bituminous	20,382	1,044	21,427
7	Ohio	17,789	5,875	23,664
8	Colorado	11,979	4,777	16,756
9	Texas	–	12,931	12,931
10	New Mexico	6,204	6,279	12,483
11	Indiana	8,860	1,057	9,917
12	North Dakota	–	9,395	9,395
13	Alaska	5,423	703	6,126
14	Missouri	1,479	4,515	5,994
15	Utah	5,583	268	5,850
16	Alabama	1,290	3,256	4,547
17	Virginia	1,528	674	2,202
18	Iowa	1,733	457	2,190
19	Oklahoma	1,237	338	1,575
20	Washington	1,332	57	1,390
21	Kansas	–	975	975
22	Tennessee	532	284	816
23	Maryland	637	80	717
24	Louisiana	–	463	463
25	Arkansas	273	144	417
26	South Dakota	–	366	366
27	Arizona	102	59	161
28	Michigan	123	5	128
29	Oregon	15	3	18
30	North Carolina	11	–	11
31	Idaho	4	–	4
32	Georgia	2	2	4
	U.S. Total	341,775	165,965	507,740

– Data not available.

Notes: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, "U.S. Coal Reserves: A Review and Update (DOE/EIA-0529(97)), August, 1998.

Producer/Distributor Stocks

Table 34. Year-End Producer and Distributor Coal Stocks by State, 1994-1998

(Thousand Short Tons)

Coal-Producing State and Region	1998	1997	1996	1995	1994	Percent Change 1997-1998	Average Annual Percent Change
							1994-1998
Alabama	1,636	1,289	1,031	1,358	1,204	26.9	8.0
Alaska	29	25	6	26	58	15.0	-16.3
Arizona	2,077	2,911	2,232	2,760	2,634	-28.6	-5.8
Arkansas	*	2	1	4	2	-80.7	-30.9
Colorado	1,594	1,364	494	1,063	1,575	16.9	.3
Illinois	952	1,358	1,190	2,069	1,651	-29.9	-12.8
Indiana	672	698	574	611	803	-3.8	-4.4
Kansas	-	-	19	27	31	-	-
Kentucky Total	4,651	5,376	4,460	4,777	5,025	-13.5	-1.9
Eastern	3,256	4,622	3,720	4,088	4,235	-29.5	-6.4
Western	1,394	754	740	689	790	85.0	15.3
Louisiana	57	152	38	309	202	-62.4	-27.1
Maryland	266	271	143	269	179	-2.0	10.4
Missouri	1	1	-	-	-	-	-
Montana	745	682	580	718	635	9.3	4.1
New Mexico	1,916	1,023	1,890	2,015	1,467	87.2	6.9
North Dakota	2,364	1,965	1,574	1,797	1,812	20.3	6.9
Ohio	1,276	774	532	1,374	833	64.8	11.3
Oklahoma	*	*	7	2	4	-70.8	-58.9
Pennsylvania Total	2,682	2,507	3,113	2,487	2,787	7.0	-9
Anthracite	643	486	1,323	389	249	32.3	26.8
Bituminous	2,039	2,021	1,790	2,098	2,538	.9	-5.3
Tennessee	36	32	23	88	57	12.9	-10.7
Texas	1,319	1,506	1,254	864	1,430	-12.4	-2.0
Utah	1,809	2,112	1,337	1,946	1,301	-14.3	8.6
Virginia	2,565	2,328	1,644	1,649	1,180	10.2	21.4
Washington	-	56	55	59	65	-100.0	-
West Virginia Total	6,008	5,504	4,947	6,176	6,692	9.2	-2.7
Northern	1,282	858	584	1,959	1,940	49.3	-9.8
Southern	4,726	4,645	4,362	4,217	4,752	1.7	-1
Wyoming	3,873	2,036	1,504	1,997	1,592	90.2	24.9
Appalachian Total¹	17,726	17,327	15,153	17,489	17,166	2.3	.8
Interior Total¹	4,396	4,471	3,823	4,575	4,913	-1.7	-2.7
Western Total¹	14,408	12,174	9,672	12,381	11,140	18.3	6.6
East of Miss. River	20,745	20,138	17,657	20,858	20,410	3.0	.4
West of Miss. River	15,785	13,835	10,991	13,587	12,809	14.1	5.4
U.S. Total	36,530	33,973	28,648	34,444	33,219	7.5	2.4

¹ For a definition of coal-producing regions, see Appendix C.

* Data round to zero.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, Form EIA-6A, "Coal Distribution Report."

Imports

Figure 3. U.S. Coal Imports, 1989-1998

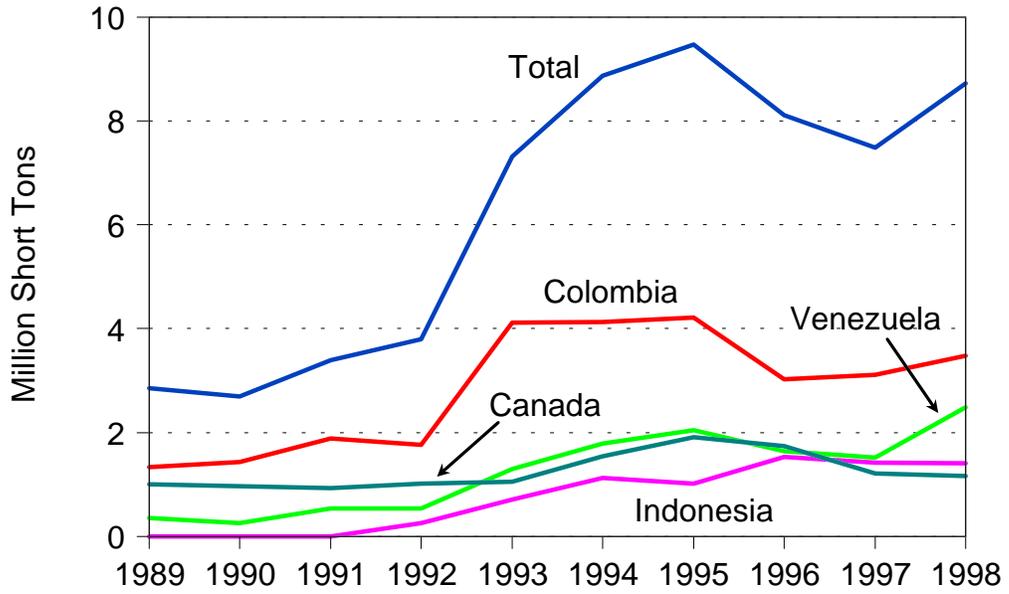


Table 35. U.S. Coal Imports by Continent and Country of Origin, 1989, 1994-1998
(Short Tons)

Continent and Country of Origin	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
North America Total	1,168,361	1,211,910	R 1,745,053	R 1,948,632	R 1,547,375	1,061,668	-3.6	-6.8	1.1
Canada	1,166,397	1,211,557	R 1,737,744	R 1,916,140	R 1,539,534	1,004,371	-3.7	-6.7	1.7
Mexico	1,964	353	7,309	R 7,836	R 7,841	57,297	456.4	-29.3	-31.3
Netherlands Antilles.....	-	-	-	24,656	-	-	-	-	-
South America Total	5,960,370	4,631,213	R 4,667,817	R 6,251,294	R 5,912,113	1,695,495	28.7	.2	15.0
Argentina	-	13	-	-	-	265	-100.0	-	-100.0
Colombia	3,478,185	3,117,122	R 3,026,598	R 4,210,265	R 4,126,016	1,338,562	11.6	-4.2	11.2
Venezuela	2,482,185	1,514,078	R 1,641,219	R 2,041,029	R 1,786,097	356,668	63.9	8.6	24.0
Europe Total	43,572	26,635	2,613	522	40	11,539	63.6	474.5	15.9
Belgium & Luxembourg.....	3,983	6,016	2,473	-	-	-	-33.8	-	-
Denmark	-	-	-	236	-	-	-	-	-
France	-	-	-	-	-	10	-	-	-100.0
Germany, FR	-	20	-	-	-	331	-100.0	-	-100.0
Italy	36	-	-	-	-	-	-	-	-
Netherlands.....	-	-	-	-	-	11,198	-	-	-100.0
Norway	-	20,383	-	-	-	-	-100.0	-	-
Poland	-	-	-	-	40	-	-	-100.0	-
Spain	36,432	-	99	-	-	-	-	-	-
Switzerland.....	-	201	-	-	-	-	-100.0	-	-
Turkey.....	-	-	41	-	-	-	-	-	-
United Kingdom.....	3,121	15	-	286	-	-	NM	-	-
Asia Total	1,416,281	1,460,503	1,534,989	1,018,512	1,153,561	47,786	-3.0	5.3	45.7
China (Mainland)	2,566	2,006	-	53	111	47,694	27.9	119.3	-27.7
Hong Kong	10	-	1	-	-	41	-	-	-14.5
Indonesia.....	1,413,704	1,425,916	1,534,986	1,018,433	1,130,468	-	-8	5.7	-
Japan	1	-	2	26	1	-	-	-	-
Korea, Republic of.....	-	-	-	-	-	51	-	-	-100.0
Vietnam	-	32,581	-	-	22,981	-	-100.0	-100.0	-
Oceania & Australia Total	135,099	156,515	164,793	254,141	100,313	34,645	-13.7	7.7	16.3
Australia	92,660	115,510	164,793	211,702	92,204	34,645	-19.8	.1	11.5
New Zealand	42,439	41,005	-	42,439	8,109	-	3.5	51.3	-
Africa Total	-	-	-	-	156,452	-	-	-100.0	-
South Africa, Rep of.....	-	-	-	-	149,748	-	-	-100.0	-
Swaziland	-	-	-	-	6,704	-	-	-100.0	-
Total	8,723,683	7,486,776	R 8,115,265	R 9,473,101	R 8,869,854	2,851,133	16.5	-4	13.2

R Revised Data.

NM Not meaningful as value is greater than 500 percent.

Note: Coal imports include coal to Puerto Rico and the Virgin Islands.

Source: U.S. Department of Commerce, Bureau of the Census, "Monthly Report IM 145."

Table 36. Coal Imports by Customs District, 1989, 1994-1998
(Short Tons)

Customs District	1998	1997	1996	1995	1994	1989	Percent Change 1997- 1998	Average Annual Percent Change	
								1994- 1998	1989- 1998
Eastern Total	2,418,583	2,508,318	R 2,664,213	R 2,465,545	R 2,084,610	461,348	-3.6	3.8	20.2
Boston, MA	1,439,079	1,533,510	1,803,234	1,484,886	977,473	27,669	-6.1	10.1	55.1
Baltimore, MD	-	-	99	28,328	88,668	258,615	-	-100.0	-100.0
Portland, ME	367,609	366,768	R 362,601	R 557,147	R 578,012	33	.2	-10.7	181.6
Buffalo, NY	3,992	6,060	2,658	2,034	-	26,849	-34.1	-	-19.1
New York City, NY	512,213	518,043	R 404,387	R 337,751	R 337,229	41	-1.1	11.0	185.2
Ogdensburg, NY	19	-	50	-	-	219	-	-	-23.8
Philadelphia, PA	95,671	83,918	91,184	55,399	78,387	147,922	14.0	5.1	-4.7
Norfolk, VA	-	19	-	-	24,841	-	-100.0	-100.0	-
Southern Total	4,447,422	2,985,167	R 2,903,372	R 4,246,556	R 4,575,693	1,363,389	49.0	-7	14.0
Mobile, AL	884,788	214,241	R 446,590	R 1,238,203	R 1,159,062	34,004	313.0	-6.5	43.6
Savannah, GA	374,677	178,085	118,509	-	29,582	-	110.4	88.6	-
Miami, FL	90,381	38,604	-	26,035	7,496	-	134.1	86.3	-
Tampa, FL	1,671,217	1,320,515	1,419,408	R 2,292,328	R 2,416,830	900,188	26.5	-8.8	7.1
New Orleans, LA	946,756	840,919	808,592	387,861	524,256	28,660	12.6	15.9	47.5
Wilmington, NC	-	-	-	-	26,648	-	-	-100.0	-
San Juan, PR	195,162	201,413	96,901	272,296	80,016	328,849	-3.1	25.0	-5.6
Houston-Galveston, TX	165,853	154,865	6,063	-	154,938	15,910	7.1	1.7	29.8
Laredo, TX	1,964	353	7,309	R 7,787	R 7,841	55,778	456.4	-29.3	-31.0
Virgin Islands	116,624	36,172	-	22,046	169,024	-	222.4	-8.8	-
Western Total	812,443	862,053	R 900,701	R 943,069	R 816,392	169,054	-5.8	-.1	19.0
Los Angeles, CA	4	149	2	-	12	-	-97.3	-24.0	-
San Diego, CA	1	-	-	49	-	19	-	-	-27.9
San Francisco, CA	-	-	-	-	-	47,745	-	-	-100.0
Honolulu, HI	681,812	759,385	810,176	844,785	670,005	34,645	-10.2	.4	39.2
Great Falls, MT	-	282	25	645	34,426	75,579	-100.0	-100.0	-100.0
Portland, OR	6,992	20,383	-	-	-	-	-65.7	-	-
Seattle, WA	123,634	81,854	R 90,498	R 97,590	R 111,949	11,066	51.0	2.5	30.8
Northern Total	1,045,235	1,131,238	R 1,646,979	R 1,817,931	R 1,393,159	857,342	-7.6	-6.9	2.2
Chicago, IL	66,829	329,778	238,592	64,394	283,106	476,060	-79.7	-30.3	-19.6
Detroit, MI	415,127	388,678	R 615,262	R 842,851	R 492,736	-	6.8	-4.2	-
Duluth, MN	-	416	291,346	244,278	77,355	431	-100.0	-100.0	-100.0
Pembina, ND	560,779	410,509	501,778	666,408	539,962	364,237	36.6	.9	4.9
Cleveland, OH	-	-	-	-	-	16,614	-	-	-100.0
Milwaukee, WI	2,500	1,857	-	-	-	-	34.6	-	-
Total	8,723,683	7,486,776	R 8,115,265	R 9,473,101	R 8,869,854	2,851,133	16.5	-4	13.2

^R Revised Data.

Source: U.S. Department of Commerce, Bureau of the Census, "Monthly Report IM 145."

Table 37. U.S. Receipts of Imported Coal by Country of Origin and Destination State, 1989, 1994-1998
(Short Tons)

Country of Origin and Destination State	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998
Australia Total	92,676	155,632	147,204	211,099	109,737	-	-40.4
Hawaii	92,676	155,632	147,204	211,099	109,737	-	-40.4
Canada Total	1,424,942	^R 893,900	1,332,243	1,401,960	1,317,929	-	59.4
Illinois	60,627	147,967	215,959	222,876	346,192	-	-59.0
Indiana	976,153	^R 474,369	735,342	760,508	592,655	-	105.8
Michigan	355,100	229,464	361,458	393,367	371,097	-	54.8
Ohio	-	652	1,454	1,410	1,635	-	-100.0
Washington	33,062	41,448	18,030	23,799	6,350	-	-20.2
Colombia Total	2,710,318	2,958,645	2,285,840	2,202,005	3,150,128	1,148,836	-8.4
Alabama	169,344	214,251	160,675	161,950	178,330	-	-20.9
Delaware	-	-	-	7,143	22,031	-	-
Florida	1,909,354	1,385,340	1,417,220	1,340,640	2,348,550	803,500	37.8
Georgia	-	-	-	-	11,902	23,136	-
Maine	-	-	45,220	-	-	-	-
Maryland	-	-	-	-	88,000	247,000	-
Massachusetts	467,100	1,077,600	630,400	557,900	135,500	62,800	-56.6
New Hampshire	34,680	35,360	32,325	134,372	163,311	-	-1.9
New Jersey	-	-	-	-	22,500	12,400	-
New York	34,800	147,050	-	-	-	-	-76.3
North Carolina	-	-	-	-	26,600	-	-
Texas	84,119	99,044	-	-	153,404	-	-15.1
Washington	10,921	-	-	-	-	-	-
Indonesia Total	899,517	782,035	833,706	428,554	437,292	-	15.0
Florida	596,979	741,264	807,803	348,854	147,215	-	-19.5
Louisiana	302,538	-	-	-	169,181	-	-
Massachusetts	-	-	-	-	7,938	-	-
New Hampshire	-	40,771	25,903	79,700	112,958	-	-100.0
Mexico Total	-	-	15,561	-	-	-	-
Texas	-	-	15,561	-	-	-	-
South Africa Total	-	-	-	-	127,300	-	-
Florida	-	-	-	-	127,300	-	-
Venezuela Total	2,415,581	1,409,628	1,861,504	2,073,645	1,456,645	65,750	71.4
Connecticut	106,000	35,000	28,000	-	-	-	202.8
Florida	235,155	58,643	298,200	891,400	421,674	37,150	301.0
Georgia	414,490	279,139	209,907	-	26,835	-	48.5
Maine	-	2,708	13,966	81,392	91,436	-	-100.0
Massachusetts	471,600	382,900	1,135,500	903,700	916,700	-	23.2
Mississippi	173,670	-	-	-	-	-	-
New Hampshire	331,371	228,969	96,033	82,425	-	-	44.7
New Jersey	39,000	-	-	-	-	28,600	-
New York	558,800	350,400	-	28,189	-	-	59.5
Pennsylvania	-	71,869	79,898	86,539	-	-	-100.0
Texas	85,495	-	-	-	-	-	-
Total	7,543,034	^R 6,199,840	6,476,058	6,317,263	6,599,031	1,214,586	21.7
Alabama	169,344	214,251	160,675	161,950	178,330	-	-20.9
Connecticut	106,000	35,000	28,000	-	-	-	202.8
Delaware	-	-	-	7,143	22,031	-	-
Florida	2,741,488	2,185,247	2,523,223	2,580,894	3,044,739	840,650	25.4
Georgia	414,490	279,139	209,907	-	38,737	23,136	48.5
Hawaii	92,676	155,632	147,204	211,099	109,737	-	-40.4
Illinois	60,627	147,967	215,959	222,876	346,192	-	-59.0
Indiana	976,153	474,369	735,342	760,508	592,655	-	105.8
Louisiana	302,538	-	-	-	169,181	-	-
Maine	-	2,708	59,186	81,392	91,436	-	-100.0
Maryland	-	-	-	-	88,000	247,000	-
Massachusetts	938,700	1,460,500	1,765,900	1,461,600	1,060,138	62,800	-35.7
Michigan	355,100	^R 229,464	361,458	393,367	371,097	-	54.8
Mississippi	173,670	-	-	-	-	-	-
New Hampshire	366,051	305,100	154,261	296,497	276,269	-	20.0
New Jersey	39,000	-	-	-	22,500	41,000	-
New York	593,600	497,450	-	28,189	-	-	19.3
North Carolina	-	-	-	-	26,600	-	-
Ohio	-	652	1,454	1,410	1,635	-	-100.0

See footnotes at end of table.

Table 37. U.S. Receipts of Imported Coal by Country of Origin and Destination State, 1989, 1994-1998 (Continued)
(Short Tons)

Country of Origin and Destination State	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998
Total (Continued)							
Pennsylvania	—	71,869	79,898	86,539	—	—	-100.0
Texas	169,614	99,044	15,561	—	153,404	—	71.3
Washington	43,983	41,448	18,030	23,799	6,350	—	6.1

^R Revised Data.

Notes: Data for 1989 are only for receipts at electric utilities. Data for 1994 through 1998 are for receipts at electric utilities, manufacturing plants and coke plants. See Table 38 and Table 39 for related data. See Technical Note 1 for the difference between receipts of imported coal and U.S. coal imports.

Sources: 1989: Federal Energy Regulatory Commission (FERC), FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants." 1994-1998: Energy Information Administration, Form EIA-3A, "Annual Coal Quality Report - Manufacturing Plants"; Form EIA-5A, "Annual Coal Quality Report - Coke Plants"; and FERC, FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

Table 38. Imported Coal Received at Electric Utilities by Country of Origin and Destination State, 1989, 1994-1998
(Short Tons)

Country of Origin and Destination State	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Canada Total	–	9,590	18,030	23,799	63,350	–	–100.0	–100.0	–
Michigan.....	–	–	–	–	57,000	–	–	–100.0	–
Washington.....	–	9,590	18,030	23,799	6,350	–	–100.0	–100.0	–
Colombia Total	2,530,053	2,744,394	2,079,945	2,040,055	2,971,798	1,148,836	–7.8	–3.9	9.2
Delaware.....	–	–	–	7,143	22,031	–	–	–100.0	–
Florida.....	1,909,354	1,385,340	1,417,220	1,340,640	2,348,550	803,500	37.8	–5.0	10.1
Georgia.....	–	–	–	–	11,902	23,136	–	–100.0	–100.0
Maryland.....	–	–	–	–	88,000	247,000	–	–100.0	–100.0
Massachusetts.....	467,100	1,077,600	630,400	557,900	135,500	62,800	–56.6	36.3	25.0
New Hampshire.....	34,680	35,360	32,325	134,372	163,311	–	–1.9	–32.1	–
New Jersey.....	–	–	–	–	22,500	12,400	–	–100.0	–100.0
New York.....	34,800	147,050	–	–	–	–	–76.3	–	–
North Carolina.....	–	–	–	–	26,600	–	–	–100.0	–
Texas.....	84,119	99,044	–	–	153,404	–	–15.1	–13.9	–
Indonesia Total	899,517	782,035	833,706	428,554	437,292	–	15.0	19.8	–
Florida.....	596,979	741,264	807,803	348,854	147,215	–	–19.5	41.9	–
Louisiana.....	302,538	–	–	–	169,181	–	–	15.6	–
Massachusetts.....	–	–	–	–	7,938	–	–	–100.0	–
New Hampshire.....	–	40,771	25,903	79,700	112,958	–	–100.0	–100.0	–
South Africa Total	–	–	–	–	127,300	–	–	–100.0	–
Florida.....	–	–	–	–	127,300	–	–	–100.0	–
Venezuela Total	2,415,581	1,335,051	1,767,640	1,905,714	1,365,209	65,750	80.9	15.3	49.2
Connecticut.....	106,000	35,000	28,000	–	–	–	202.8	–	–
Florida.....	235,155	58,643	298,200	891,400	421,674	37,150	301.0	–13.6	22.8
Georgia.....	414,490	279,139	209,907	–	26,835	–	48.5	98.2	–
Massachusetts.....	471,600	382,900	1,135,500	903,700	916,700	–	23.2	–15.3	–
Mississippi.....	173,670	–	–	–	–	–	–	–	–
New Hampshire.....	331,371	228,969	96,033	82,425	–	–	44.7	–	–
New Jersey.....	39,000	–	–	–	–	28,600	–	–	3.5
New York.....	558,800	350,400	–	28,189	–	–	59.5	–	–
Texas.....	85,495	–	–	–	–	–	–	–	–
Total	5,845,151	4,871,070	4,699,321	4,398,122	4,964,949	1,214,586	20.0	4.2	19.1
Connecticut.....	106,000	35,000	28,000	–	–	–	202.8	–	–
Delaware.....	–	–	–	7,143	22,031	–	–	–100.0	–
Florida.....	2,741,488	2,185,247	2,523,223	2,580,894	3,044,739	840,650	25.4	–2.6	14.0
Georgia.....	414,490	279,139	209,907	–	38,737	23,136	48.5	80.9	37.8
Louisiana.....	302,538	–	–	–	169,181	–	–	15.6	–
Maryland.....	–	–	–	–	88,000	247,000	–	–100.0	–100.0
Massachusetts.....	938,700	1,460,500	1,765,900	1,461,600	1,060,138	62,800	–35.7	–3.0	35.0
Michigan.....	–	–	–	–	57,000	–	–	–100.0	–
Mississippi.....	173,670	–	–	–	–	–	–	–	–
New Hampshire.....	366,051	305,100	154,261	296,497	276,269	–	20.0	7.3	–
New Jersey.....	39,000	–	–	–	22,500	41,000	–	14.7	–5
New York.....	593,600	497,450	–	28,189	–	–	19.3	–	–
North Carolina.....	–	–	–	–	26,600	–	–	–100.0	–
Texas.....	169,614	99,044	–	–	153,404	–	71.3	2.5	–
Washington.....	–	9,590	18,030	23,799	6,350	–	–100.0	–100.0	–

Source: Federal Energy Regulatory Commission, FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

Table 39. Imported Coal Received at Manufacturing and Coke Plants by Country of Origin and Destination State, 1996-1998
(Short Tons)

Country of Origin and Destination State	Manufacturing			Coke Plants			Total			Percent Change 1997-1998
	1998	1997	1996	1998	1997	1996	1998	1997	1996	
Australia Total	92,676	155,632	147,204	-	-	-	92,676	155,632	147,204	-40.5
Hawaii	92,676	155,632	147,204	-	-	-	92,676	155,632	147,204	-40.5
Canada Total	33,062	32,510	1,454	1,391,880 ^R	851,800	1,312,759	1,424,942	884,310	1,314,213	61.1
Illinois	-	-	-	60,627	147,967	215,959	60,627	147,967	215,959	-59.0
Indiana	-	-	-	976,153	474,369	735,342	976,153	474,369	735,342	105.8
Michigan	-	-	-	355,100 ^R	229,464	361,458	355,100	229,464	361,458	54.8
Ohio	-	652	1,454	-	-	-	-	652	1,454	-100.0
Washington	33,062	31,858	-	-	-	-	33,062	31,858	-	3.8
Colombia Total	180,265	214,251	205,895	-	-	-	180,265	214,251	205,895	-15.9
Alabama	169,344	214,251	160,675	-	-	-	169,344	214,251	160,675	-21.0
Maine	-	-	45,220	-	-	-	-	-	45,220	-
Washington	10,921	-	-	-	-	-	10,921	-	-	-
Mexico Total	-	-	15,561	-	-	-	-	-	15,561	-
Texas	-	-	15,561	-	-	-	-	-	15,561	-
Venezuela Total	-	74,577	93,864	-	-	-	-	74,577	93,864	-100.0
Maine	-	2,708	13,966	-	-	-	-	2,708	13,966	-100.0
Pennsylvania	-	71,869	79,898	-	-	-	-	71,869	79,898	-100.0
Total	306,003	476,970	463,978	1,391,880 ^R	851,800	1,312,759	1,697,883	1,328,770	1,776,737	27.8
Alabama	169,344	214,251	160,675	-	-	-	169,344	214,251	160,675	-21.0
Hawaii	92,676	155,632	147,204	-	-	-	92,676	155,632	147,204	-40.5
Illinois	-	-	-	60,627	147,967	215,959	60,627	147,967	215,959	-59.0
Indiana	-	-	-	976,153	474,369	735,342	976,153	474,369	735,342	105.8
Maine	-	2,708	59,186	-	-	-	-	2,708	59,186	-100.0
Michigan	-	-	-	355,100 ^R	229,464	361,458	355,100	229,464	361,458	54.8
Ohio	-	652	1,454	-	-	-	-	652	1,454	-100.0
Pennsylvania	-	71,869	79,898	-	-	-	-	71,869	79,898	-100.0
Texas	-	-	15,561	-	-	-	-	-	15,561	-
Washington	43,983	31,858	-	-	-	-	43,983	31,858	-	38.1

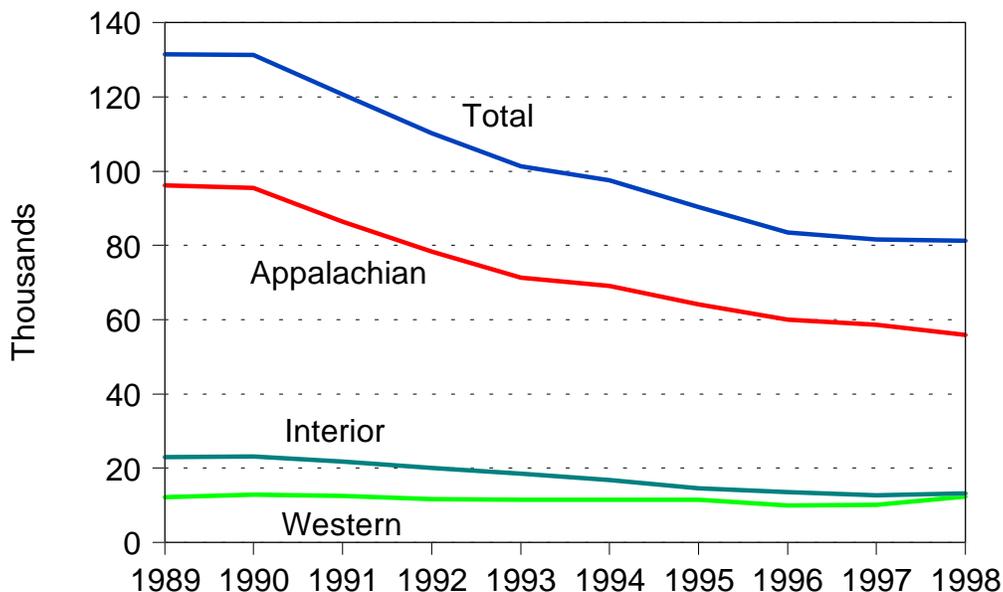
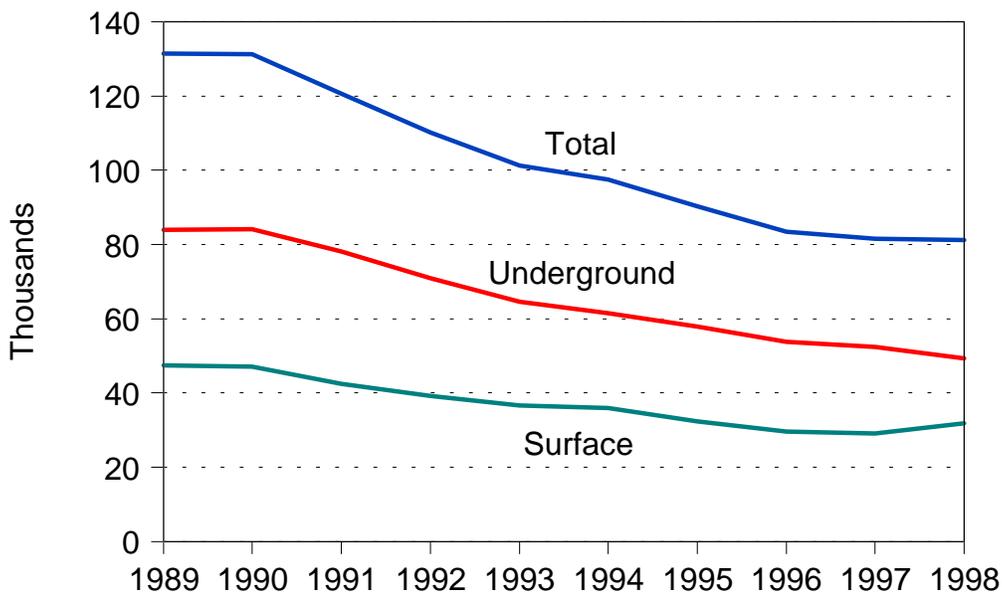
^R Revised Data.

Sources: Energy Information Administration, Form EIA-3A, "Annual Coal Quality Report - Manufacturing Plants"; and Form EIA-5A, "Annual Coal Quality Report - Coke Plants."

Employment and Productivity

Employment

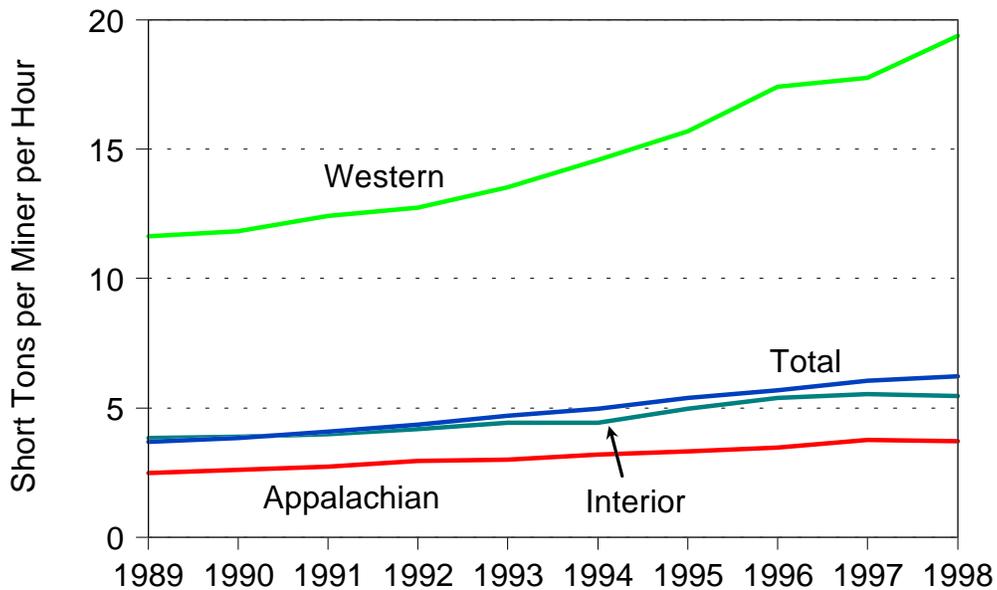
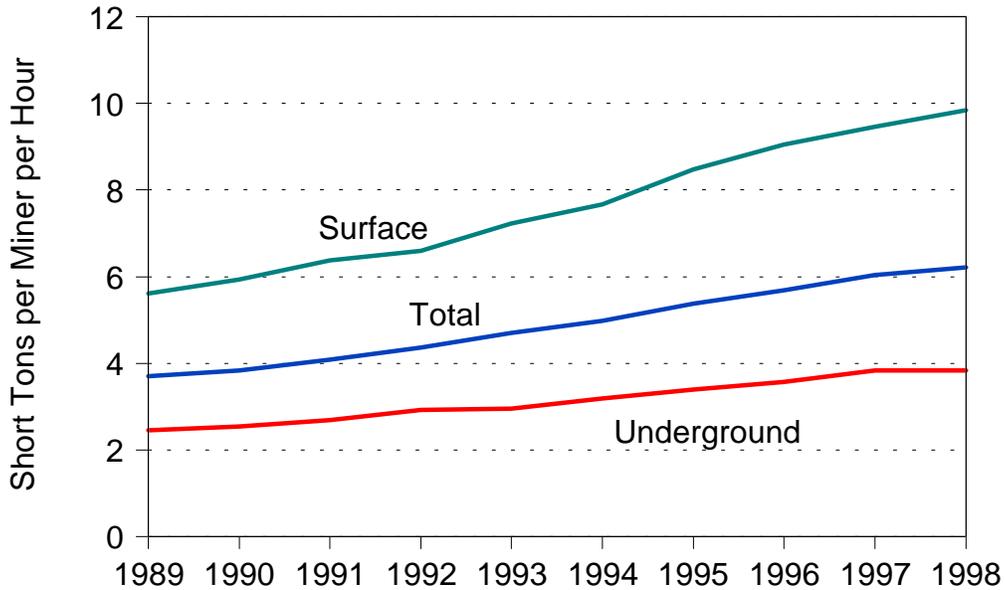
Figure 4. Average Number of U.S. Miners by Mine Type and by Region, 1989-1998



Note: Scale has been enlarged to show detail in the short tons per miner per hour by type of mining plot. Because vertical scales differ, graphs should not be compared. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons of coal during the year and preparation plants with less than 5,000 employee hours. Includes all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations. Excludes office workers. Includes mining operations management and all technical and engineering personnel. Short tons produced per miner per hour is calculated by dividing total coal production by the direct labor hours worked by all mine employees.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report"; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Figure 5. U.S. Coal Mining Productivity by Mine Type and by Region, 1989-1998



Note: Scale has been enlarged to show detail in the short tons per miner per hour by type of mining plot. Because vertical scales differ, graphs should not be compared. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons of coal during the year and preparation plants with less than 5,000 employee hours. Includes all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations. Excludes office workers. Includes mining operations management and all technical and engineering personnel. Short tons produced per miner per hour is calculated by dividing total coal production by the direct labor hours worked by all mine employees.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report"; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 40. Average Number of Miners by State, 1989, 1994-1998

Coal-Producing State and Region	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Alabama.....	4,722	4,928	5,031	5,567	5,418	6,505	-4.2	-3.4	-3.5
Alaska.....	104	99	102	102	105	87	5.0	-.2	2.0
Arizona.....	730	676	651	831	864	780	8.0	-4.1	-7
Arkansas.....	4	2	-	4	15	8	100.0	-28.1	-7.4
California.....	-	-	-	-	-	5	-	-	-
Colorado.....	1,684	1,362	1,332	1,777	1,905	2,019	23.6	-3.0	-2.0
Illinois.....	4,102	4,612	5,174	5,652	6,591	10,003	-11.0	-11.2	-9.4
Indiana.....	2,807	2,712	2,579	2,571	3,206	3,684	3.5	-3.3	-3.0
Iowa.....	-	-	-	-	20	149	-	-	-
Kansas.....	19	67	54	54	63	165	-71.6	-25.9	-21.3
Kentucky Total.....	18,025	18,937	18,826	21,125	23,368	30,656	-4.8	-6.3	-5.7
Eastern.....	14,617	15,422	15,130	16,840	18,577	24,620	-5.2	-5.8	-5.6
Western.....	3,408	3,515	3,696	4,285	4,791	6,036	-3.0	-8.2	-6.1
Louisiana.....	161	114	111	114	111	69	41.2	9.7	9.9
Maryland.....	433	458	469	458	451	554	-5.4	-1.0	-2.7
Missouri.....	72	51	80	92	116	428	41.2	-11.2	-18.0
Montana.....	811	708	705	722	705	682	14.5	3.6	1.9
New Mexico.....	1,582	1,339	1,347	1,747	1,786	1,470	18.1	-3.0	.8
North Dakota.....	895	657	640	716	645	850	36.2	8.5	.6
Ohio.....	3,199	3,124	3,232	3,386	3,983	7,374	2.4	-5.3	-8.9
Oklahoma.....	192	269	233	241	253	414	-28.6	-6.7	-8.2
Pennsylvania Total.....	9,443	9,575	9,021	8,968	9,975	15,469	-1.4	-1.4	-5.3
Anthracite.....	1,185	1,287	1,171	1,069	1,183	1,394	-7.9	*	-1.8
Bituminous.....	8,258	8,288	7,850	7,899	8,792	14,075	-4	-1.5	-5.8
Tennessee.....	517	707	756	681	669	1,857	-26.9	-6.2	-13.2
Texas.....	2,382	1,363	1,550	1,590	1,733	2,109	74.8	8.3	1.4
Utah.....	1,919	1,922	1,804	1,893	1,675	2,169	-1	3.4	-1.3
Virginia.....	5,734	6,235	6,241	6,919	8,121	10,371	-8.0	-8.3	-6.4
Washington.....	480	577	589	566	570	787	-16.8	-4.2	-5.3
West Virginia Total.....	17,167	18,245	20,121	21,334	21,861	29,482	-5.9	-5.9	-5.8
Northern.....	4,139	4,980	5,279	6,114	6,659	10,280	-16.9	-11.2	-9.6
Southern.....	13,028	13,265	14,842	15,220	15,202	19,202	-1.8	-3.8	-4.2
Wyoming.....	4,073	2,777	2,814	3,142	3,291	3,351	46.7	5.5	2.2
Appalachian Total¹.....	55,832	58,694	60,001	64,153	69,055	96,232	-4.9	-5.2	-5.9
Interior Total¹.....	13,147	12,705	13,477	14,603	16,899	23,065	3.5	-6.1	-6.0
Western Total¹.....	12,278	10,117	9,984	11,496	11,546	12,200	21.4	1.5	.1
East of Miss. River.....	66,149	69,533	71,450	76,661	83,643	115,955	-4.9	-5.7	-6.0
West of Miss. River.....	15,108	11,983	12,012	13,591	13,857	15,542	26.1	2.2	-3
U.S. Total.....	81,257	81,516	83,462	90,252	97,500	131,497	-3	-4.4	-5.2

¹ For a definition of coal-producing regions, see Appendix C.

* Data round to zero.

Notes: Includes all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations. Excludes office workers. For 1997 and prior years, total also includes all technical and engineering personnel. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons and preparation plants with less than 5,000 employee hours, which are not required to provide data.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report"; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 41. Average Number of Miners at Underground Mines by State, 1989, 1994-1998

Coal-Producing State and Region	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Alabama.....	3,794	4,014	4,145	4,314	3,775	4,371	-5.5	0.1	-1.6
Arkansas.....	-	-	-	-	10	-	-	-	-
Colorado.....	1,126	923	918	1,301	1,248	1,490	22.0	-2.5	-3.1
Illinois.....	3,624	4,044	4,256	4,780	5,595	8,084	-10.4	-10.3	-8.5
Indiana.....	385	411	457	485	485	521	-6.3	-5.6	-3.3
Iowa.....	-	-	-	-	-	15	-	-	-
Kentucky Total.....	12,149	12,947	12,876	14,542	15,837	20,752	-6.2	-6.4	-5.8
Eastern.....	9,453	10,369	10,275	11,366	12,849	16,586	-8.8	-7.4	-6.0
Western.....	2,696	2,578	2,601	3,176	2,988	4,166	4.6	-2.5	-4.7
Maryland.....	284	304	308	293	284	282	-6.6	-	.1
Montana.....	-	-	18	-	-	-	-	-	-
New Mexico.....	38	-	-	132	168	49	-	-31.0	-2.8
Ohio.....	1,718	1,759	1,706	1,670	1,694	2,953	-2.3	.3	-5.8
Oklahoma.....	44	36	26	12	32	36	22.2	8.3	2.3
Pennsylvania Total.....	6,206	6,202	5,599	5,659	6,192	9,578	.1	*	-4.7
Anthracite.....	186	174	147	152	149	193	6.9	5.7	-4
Bituminous.....	6,020	6,028	5,452	5,507	6,043	9,385	-1	-1	-4.8
Tennessee.....	273	390	467	473	511	1,471	-30.0	-14.5	-17.1
Utah.....	1,894	1,922	1,803	1,893	1,675	2,169	-1.4	3.1	-1.5
Virginia.....	4,626	5,101	5,098	5,776	6,844	8,889	-9.3	-9.3	-7.0
West Virginia Total.....	13,148	14,329	16,003	16,347	16,956	23,048	-8.2	-6.2	-6.0
Northern.....	3,627	4,551	4,764	5,561	5,997	8,656	-20.3	-11.8	-9.2
Southern.....	9,521	9,778	11,239	10,786	10,959	14,392	-2.6	-3.4	-4.5
Wyoming.....	82	105	116	202	256	280	-21.9	-24.8	-12.8
Appalachian Total¹.....	39,502	42,468	43,601	45,898	49,105	67,178	-7.0	-5.3	-5.7
Interior Total¹.....	6,749	7,069	7,340	8,453	9,110	12,822	-4.5	-7.2	-6.9
Western Total¹.....	3,140	2,950	2,855	3,528	3,347	3,988	6.4	-1.6	-2.6
East of Miss. River.....	46,207	49,501	50,915	54,339	58,173	79,949	-6.6	-5.6	-5.9
West of Miss. River.....	3,184	2,986	2,881	3,540	3,389	4,039	6.6	-1.5	-2.6
U.S. Total.....	49,391	52,487	53,796	57,879	61,562	83,988	-5.9	-5.3	-5.7

¹ For a definition of coal-producing regions, see Appendix C.

* Data round to zero.

Notes: Includes all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations. Excludes office workers. For 1997 and prior years, total also includes all technical and engineering personnel. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons and preparation plants with less than 5,000 employee hours, which are not required to provide data.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report"; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 42. Average Number of Miners at Surface Mines by State, 1989, 1994-1998

Coal-Producing State and Region	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Alabama.....	928	914	886	1,253	1,643	2,134	1.5	-13.3	-8.8
Alaska.....	104	99	102	102	105	87	5.0	-.2	2.0
Arizona.....	730	676	651	831	864	780	8.0	-4.1	-7
Arkansas.....	4	2	-	4	5	8	100.0	-5.4	-7.4
California.....	-	-	-	-	-	5	-	-	-
Colorado.....	558	439	414	476	657	529	27.1	-4.0	.6
Illinois.....	478	568	918	872	996	1,919	-15.8	-16.8	-14.3
Indiana.....	2,422	2,301	2,122	2,086	2,721	3,163	5.3	-2.9	-2.9
Iowa.....	-	-	-	-	20	134	-	-	-
Kansas.....	19	67	54	54	63	165	-71.6	-25.9	-21.3
Kentucky Total.....	5,876	5,990	5,950	6,583	7,531	9,904	-1.9	-6.0	-5.6
Eastern.....	5,164	5,053	4,855	5,474	5,728	8,034	2.2	-2.5	-4.8
Western.....	712	937	1,095	1,109	1,803	1,870	-24.0	-20.7	-10.2
Louisiana.....	161	114	111	114	111	69	41.2	9.7	9.9
Maryland.....	149	154	161	165	167	272	-3.2	-2.8	-6.5
Missouri.....	72	51	80	92	116	428	41.2	-11.2	-18.0
Montana.....	811	708	687	722	705	682	14.5	3.6	1.9
New Mexico.....	1,544	1,339	1,347	1,615	1,618	1,421	15.3	-1.2	.9
North Dakota.....	895	657	640	716	645	850	36.2	8.5	.6
Ohio.....	1,481	1,365	1,526	1,716	2,289	4,421	8.5	-10.3	-11.4
Oklahoma.....	148	233	207	229	221	378	-36.5	-9.5	-9.9
Pennsylvania Total.....	3,237	3,373	3,422	3,309	3,783	5,891	-4.0	-3.8	-6.4
Anthracite.....	999	1,113	1,024	917	1,034	1,201	-10.2	-.8	-2.0
Bituminous.....	2,238	2,260	2,398	2,392	2,749	4,690	-1.0	-5.0	-7.9
Tennessee.....	244	317	289	208	158	386	-23.0	11.5	-5.0
Texas.....	2,382	1,363	1,550	1,590	1,733	2,109	74.8	8.3	1.4
Utah.....	25	-	1	-	-	-	-	-	-
Virginia.....	1,108	1,134	1,143	1,143	1,277	1,482	-2.3	-3.5	-3.2
Washington.....	480	577	589	566	570	787	-16.8	-4.2	-5.3
West Virginia Total.....	4,019	3,916	4,118	4,987	4,905	6,434	2.6	-4.8	-5.1
Northern.....	512	429	515	553	662	1,624	19.3	-6.2	-12.0
Southern.....	3,507	3,487	3,603	4,434	4,243	4,810	.6	-4.6	-3.4
Wyoming.....	3,991	2,672	2,698	2,940	3,035	3,071	49.4	7.1	2.9
Appalachian Total¹.....	16,330	16,226	16,400	18,255	19,950	29,054	.6	-4.9	-6.2
Interior Total¹.....	6,398	5,636	6,137	6,150	7,789	10,243	13.5	-4.8	-5.1
Western Total¹.....	9,138	7,167	7,129	7,968	8,199	8,212	27.5	2.7	1.2
East of Miss. River.....	19,942	20,032	20,535	22,322	25,470	36,006	-.4	-5.9	-6.3
West of Miss. River.....	11,924	8,997	9,131	10,051	10,468	11,503	32.5	3.3	.4
U.S. Total.....	31,866	29,029	29,666	32,373	35,938	47,509	9.8	-3.0	-4.3

¹ For a definition of coal-producing regions, see Appendix C.

Notes: Includes all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations. Excludes office workers. For 1997 and prior years, total also includes all technical and engineering personnel. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons and preparation plants with less than 5,000 employee hours, which are not required to provide data.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report"; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 43. Average Number of Miners by State and Mine Production Range, 1998

Coal-Producing State and Region	Mine Production Range (thousand short tons)							Total
	1,000 and over	500 to 1,000	200 to 500	100 to 200	50 to 100	10 to 50	Zero ¹	
Alabama.....	3,558	105	427	85	165	229	153	4,722
Alaska.....	104	-	-	-	-	-	-	104
Arizona.....	697	-	-	-	-	-	33	730
Arkansas.....	-	-	-	-	-	4	-	4
Colorado.....	1,508	-	149	-	-	-	27	1,684
Illinois.....	3,490	183	170	-	-	87	172	4,102
Indiana.....	1,978	472	210	23	21	63	40	2,807
Kansas.....	-	-	-	19	-	-	-	19
Kentucky Total.....	3,894	4,590	3,451	1,952	1,081	1,247	1,810	18,025
Eastern.....	2,112	3,595	3,146	1,916	1,076	1,237	1,535	14,617
Western.....	1,782	995	305	36	5	10	275	3,408
Louisiana.....	125	36	-	-	-	-	-	161
Maryland.....	211	-	41	79	48	22	32	433
Missouri.....	-	-	-	58	-	14	-	72
Montana.....	803	-	8	-	-	-	-	811
New Mexico.....	1,544	-	23	-	-	-	15	1,582
North Dakota.....	895	-	-	-	-	-	-	895
Ohio.....	1,939	332	452	163	69	147	97	3,199
Oklahoma.....	-	41	115	21	15	-	-	192
Pennsylvania Total.....	3,701	1,805	1,047	774	559	609	948	9,443
Anthracite.....	-	43	159	194	161	232	396	1,185
Bituminous.....	3,701	1,762	888	580	398	377	552	8,258
Tennessee.....	-	59	117	71	118	90	62	517
Texas.....	2,319	-	63	-	-	-	-	2,382
Utah.....	1,451	266	71	49	25	-	57	1,919
Virginia.....	691	732	1,570	1,008	596	376	761	5,734
Washington.....	472	-	-	-	-	8	-	480
West Virginia Total.....	6,774	3,132	2,307	1,489	923	587	1,955	17,167
Northern.....	2,657	406	423	266	90	63	234	4,139
Southern.....	4,117	2,726	1,884	1,223	833	524	1,721	13,028
Wyoming.....	3,940	51	42	-	13	27	-	4,073
Appalachian Total².....	18,986	9,760	9,107	5,585	3,554	3,297	5,543	55,832
Interior Total².....	9,694	1,727	863	157	41	178	487	13,147
Western Total².....	11,414	317	293	49	38	35	132	12,278
East of Miss. River.....	26,236	11,410	9,792	5,644	3,580	3,457	6,030	66,149
West of Miss. River.....	13,858	394	471	147	53	53	132	15,108
U.S. Total.....	40,094	11,804	10,263	5,791	3,633	3,510	6,162	81,257

¹ Includes all employees at preparation plants and tipples not co-located with a mine.

² For a definition of coal-producing regions, see Appendix C.

Source: U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Notes: Includes all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations. Excludes office workers. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons and preparation plants with less than 5,000 employee hours, which are not required to provide data.

Table 44. Average Number of Miners at Underground Mines by State and Mine Production Range, 1998

Coal-Producing State and Region	Mine Production Range (thousand short tons)							Total
	1,000 and over	500 to 1,000	200 to 500	100 to 200	50 to 100	10 to 50	Zero ¹	
Alabama.....	3,408	—	175	—	—	98	113	3,794
Colorado.....	974	—	125	—	—	—	27	1,126
Illinois.....	3,384	41	53	—	—	—	146	3,624
Indiana.....	337	—	28	—	—	—	20	385
Kentucky Total.....	3,193	2,631	2,074	1,435	869	656	1,291	12,149
Eastern.....	1,411	2,126	1,905	1,435	869	656	1,051	9,453
Western.....	1,782	505	169	—	—	—	240	2,696
Maryland.....	211	—	41	—	—	—	32	284
New Mexico.....	—	—	23	—	—	—	15	38
Ohio.....	1,613	—	79	—	—	—	26	1,718
Oklahoma.....	—	—	44	—	—	—	—	44
Pennsylvania Total.....	3,582	1,153	475	299	145	161	391	6,206
Anthracite.....	—	—	—	46	—	82	58	186
Bituminous.....	3,582	1,153	475	253	145	79	333	6,020
Tennessee.....	—	—	38	53	78	74	30	273
Utah.....	1,451	266	71	49	25	—	32	1,894
Virginia.....	691	455	1,183	802	536	324	635	4,626
West Virginia Total.....	4,841	2,492	1,811	1,208	823	466	1,507	13,148
Northern.....	2,564	332	309	216	36	24	146	3,627
Southern.....	2,277	2,160	1,502	992	787	442	1,361	9,521
Wyoming.....	82	—	—	—	—	—	—	82
Appalachian Total².....	15,757	6,226	5,707	3,797	2,451	1,779	3,785	39,502
Interior Total².....	5,503	546	294	—	—	—	406	6,749
Western Total².....	2,507	266	219	49	25	—	74	3,140
East of Miss. River.....	21,260	6,772	5,957	3,797	2,451	1,779	4,191	46,207
West of Miss. River.....	2,507	266	263	49	25	—	74	3,184
U.S. Total.....	23,767	7,038	6,220	3,846	2,476	1,779	4,265	49,391

¹ Includes all employees at preparation plants and tipples not co-located with a mine.

² For a definition of coal-producing regions, see Appendix C.

Source: U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Notes: Includes all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations. Excludes office workers. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons and preparation plants with less than 5,000 employee hours, which are not required to provide data.

Table 45. Average Number of Miners at Surface Mines by State and Mine Production Range, 1998

Coal-Producing State and Region	Mine Production Range (thousand short tons)							Total
	1,000 and over	500 to 1,000	200 to 500	100 to 200	50 to 100	10 to 50	Zero ¹	
Alabama.....	150	105	252	85	165	131	40	928
Alaska.....	104	-	-	-	-	-	-	104
Arizona.....	697	-	-	-	-	-	33	730
Arkansas.....	-	-	-	-	-	4	-	4
Colorado.....	534	-	24	-	-	-	-	558
Illinois.....	106	142	117	-	-	87	26	478
Indiana.....	1,641	472	182	23	21	63	20	2,422
Kansas.....	-	-	-	19	-	-	-	19
Kentucky Total.....	701	1,959	1,377	517	212	591	519	5,876
Eastern.....	701	1,469	1,241	481	207	581	484	5,164
Western.....	-	490	136	36	5	10	35	712
Louisiana.....	125	36	-	-	-	-	-	161
Maryland.....	-	-	-	79	48	22	-	149
Missouri.....	-	-	-	58	-	14	-	72
Montana.....	803	-	8	-	-	-	-	811
New Mexico.....	1,544	-	-	-	-	-	-	1,544
North Dakota.....	895	-	-	-	-	-	-	895
Ohio.....	326	332	373	163	69	147	71	1,481
Oklahoma.....	-	41	71	21	15	-	-	148
Pennsylvania Total.....	119	652	572	475	414	448	557	3,237
Anthracite.....	-	43	159	148	161	150	338	999
Bituminous.....	119	609	413	327	253	298	219	2,238
Tennessee.....	-	59	79	18	40	16	32	244
Texas.....	2,319	-	63	-	-	-	-	2,382
Utah.....	-	-	-	-	-	-	25	25
Virginia.....	-	277	387	206	60	52	126	1,108
Washington.....	472	-	-	-	-	8	-	480
West Virginia Total.....	1,933	640	496	281	100	121	448	4,019
Northern.....	93	74	114	50	54	39	88	512
Southern.....	1,840	566	382	231	46	82	360	3,507
Wyoming.....	3,858	51	42	-	13	27	-	3,991
Appalachian Total².....	3,229	3,534	3,400	1,788	1,103	1,518	1,758	16,330
Interior Total².....	4,191	1,181	569	157	41	178	81	6,398
Western Total².....	8,907	51	74	-	13	35	58	9,138
East of Miss. River.....	4,976	4,638	3,835	1,847	1,129	1,678	1,839	19,942
West of Miss. River.....	11,351	128	208	98	28	53	58	11,924
U.S. Total.....	16,327	4,766	4,043	1,945	1,157	1,731	1,897	31,866

¹ Includes all employees at preparation plants and tipples not co-located with a mine.

² For a definition of coal-producing regions, see Appendix C.

Source: U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Notes: Includes all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations. Excludes office workers. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons and preparation plants with less than 5,000 employee hours, which are not required to provide data.

Table 46. Average Number of Miners by State, Mine Type, and Union Type, 1998

Coal-Producing State and Region	UMWA	Other Unions	Union Total	Nonunion	Total
Alabama	3,247	—	3,247	1,475	4,722
Underground.....	2,980	—	2,980	814	3,794
Surface.....	267	—	267	661	928
Alaska	—	104	104	—	104
Surface.....	—	104	104	—	104
Arizona	730	—	730	—	730
Surface.....	730	—	730	—	730
Arkansas	—	—	—	4	4
Surface.....	—	—	—	4	4
Colorado	243	141	384	1,300	1,684
Underground.....	128	—	128	998	1,126
Surface.....	115	141	256	302	558
Illinois	2,382	404	2,786	1,316	4,102
Underground.....	2,113	329	2,442	1,182	3,624
Surface.....	269	75	344	134	478
Indiana	1,125	—	1,125	1,682	2,807
Underground.....	—	—	—	385	385
Surface.....	1,125	—	1,125	1,297	2,422
Kansas	—	—	—	19	19
Surface.....	—	—	—	19	19
Kentucky Total	1,639	28	1,667	16,358	18,025
Underground.....	1,435	28	1,463	10,686	12,149
Surface.....	204	—	204	5,672	5,876
Eastern	498	28	526	14,091	14,617
Underground.....	353	28	381	9,072	9,453
Surface.....	145	—	145	5,019	5,164
Western	1,141	—	1,141	2,267	3,408
Underground.....	1,082	—	1,082	1,614	2,696
Surface.....	59	—	59	653	712
Louisiana	—	—	—	161	161
Surface.....	—	—	—	161	161
Maryland	—	—	—	433	433
Underground.....	—	—	—	284	284
Surface.....	—	—	—	149	149
Missouri	—	—	—	72	72
Surface.....	—	—	—	72	72
Montana	353	352	705	106	811
Surface.....	353	352	705	106	811
New Mexico	516	821	1,337	245	1,582
Underground.....	—	15	15	23	38
Surface.....	516	806	1,322	222	1,544
North Dakota	114	137	251	644	895
Surface.....	114	137	251	644	895
Ohio	1,767	—	1,767	1,432	3,199
Underground.....	1,473	—	1,473	245	1,718
Surface.....	294	—	294	1,187	1,481
Oklahoma	—	—	—	192	192
Underground.....	—	—	—	44	44
Surface.....	—	—	—	148	148
Pennsylvania Total	4,742	17	4,759	4,684	9,443
Underground.....	4,077	6	4,083	2,123	6,206
Surface.....	665	11	676	2,561	3,237
Anthracite	495	14	509	676	1,185
Underground.....	1	4	5	181	186
Surface.....	494	10	504	495	999
Bituminous	4,247	3	4,250	4,008	8,258
Underground.....	4,076	2	4,078	1,942	6,020
Surface.....	171	1	172	2,066	2,238
Tennessee	—	—	—	517	517
Underground.....	—	—	—	273	273
Surface.....	—	—	—	244	244
Texas	—	1,406	1,406	976	2,382
Surface.....	—	1,406	1,406	976	2,382
Utah	517	—	517	1,402	1,919
Underground.....	517	—	517	1,377	1,894
Surface.....	—	—	—	25	25
Virginia	938	153	1,091	4,643	5,734
Underground.....	936	107	1,043	3,583	4,626
Surface.....	2	46	48	1,060	1,108
Washington	—	472	472	8	480
Surface.....	—	472	472	8	480
West Virginia Total	8,517	31	8,548	8,619	17,167
Underground.....	6,975	1	6,976	6,172	13,148
Surface.....	1,542	30	1,572	2,447	4,019

See footnotes at end of table.

Table 46. Average Number of Miners by State, Mine Type, and Union Type, 1998 (Continued)

Coal-Producing State and Region	UMWA	Other Unions	Union Total	Nonunion	Total
Northern	2,408	—	2,408	1,731	4,139
Underground	2,408	—	2,408	1,219	3,627
Surface	—	—	—	512	512
Southern	6,109	31	6,140	6,888	13,028
Underground	4,567	1	4,568	4,953	9,521
Surface	1,542	30	1,572	1,935	3,507
Wyoming	304	491	795	3,278	4,073
Underground	—	—	—	82	82
Surface	304	491	795	3,196	3,991
Appalachian Total¹	19,709	229	19,938	35,894	55,832
Underground	16,794	142	16,936	22,566	39,502
Surface	2,915	87	3,002	13,328	16,330
Interior Total¹	4,648	1,810	6,458	6,689	13,147
Underground	3,195	329	3,524	3,225	6,749
Surface	1,453	1,481	2,934	3,464	6,398
Western Total¹	2,777	2,518	5,295	6,983	12,278
Underground	645	15	660	2,480	3,140
Surface	2,132	2,503	4,635	4,503	9,138
East of Miss. River	24,357	633	24,990	41,159	66,149
Underground	19,989	471	20,460	25,747	46,207
Surface	4,368	162	4,530	15,412	19,942
West of Miss. River	2,777	3,924	6,701	8,407	15,108
Underground	645	15	660	2,524	3,184
Surface	2,132	3,909	6,041	5,883	11,924
U.S. Total	27,134	4,557	31,691	49,566	81,257
Underground	20,634	486	21,120	28,271	49,391
Surface	6,500	4,071	10,571	21,295	31,866

¹ For a definition of coal-producing regions, see Appendix C.

Notes: Includes all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations. Excludes office workers. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons and preparation plants with less than 5,000 employee hours, which are not required to provide data. See Glossary for listing of other unions.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 47. U.S. Coal Mine Injuries, 1989, 1994-1998

Injury Type	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Injuries Total¹	5,222	^R 5,818	6,148	7,377	8,746	12,040	-10.2	-12.1	-8.9
Fatal	25	30	39	47	45	68	-16.7	-13.7	-10.5
Nonfatal ²	5,197	^R 5,788	6,109	7,330	8,701	11,972	-10.2	-12.1	-8.9
Injuries per 200,000									
Employee-Hours Total	5.91	^R 5.39	5.66	6.62	7.28	8.41	9.6	-5.1	-3.8
Fatal .....	.03	.03	.04	.04	.04	.05	—	-6.9	-5.5
Nonfatal ²	5.88	^R 5.35	5.62	6.58	7.24	8.37	9.9	-5.1	-3.8

¹ Includes contractors, preparation plants and independent shops and yards.

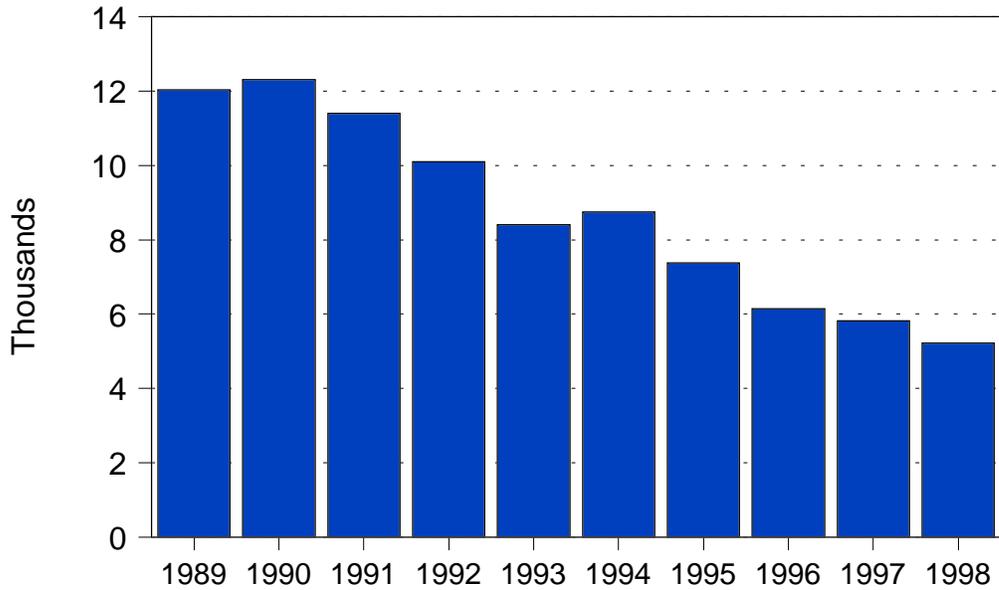
² Includes only non-fatal injuries that resulted in absence from work.

^R Revised.

Note: Calculations of growth rate are based using unrounded values.

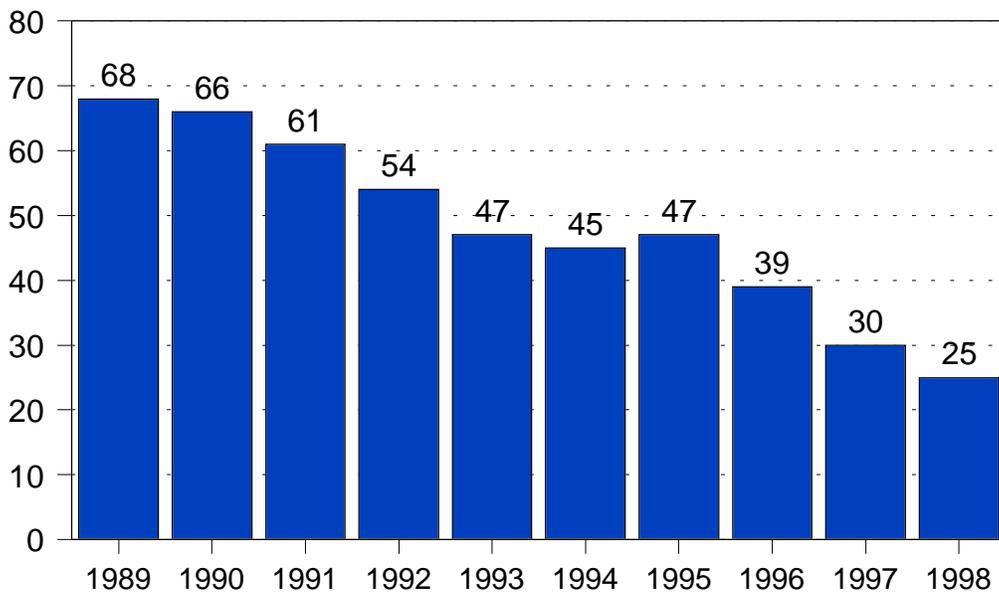
Source: U.S. Department of Labor, Mine Safety and Health Administration, *Mine Injuries and Worktime, Quarterly*, various issues.

Figure 6. U.S. Coal Mine Injuries, 1989-1998



Sources: U.S. Department of Labor, Mine Safety and Health Administration, *Mine Injuries and Worktime, Quarterly*, various issues.

Figure 7. U.S. Coal Mine Fatalities, 1989-1998



Sources: U.S. Department of Labor, Mine Safety and Health Administration, *Mine Injuries and Worktime, Quarterly*, various issues.

Productivity

Table 48. Coal Mining Productivity by State, 1989, 1994-1998
(Short Tons of Coal Produced per Miner per Hour)

Coal-Producing State and Region	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Alabama.....	2.33	2.39	2.20	2.24	2.25	2.25	-2.5	0.8	0.4
Alaska.....	5.45	6.41	6.81	7.46	6.94	7.73	-15.0	-5.8	-3.8
Arizona.....	6.43	6.79	6.30	6.34	6.71	6.25	-5.3	-1.0	.3
Arkansas.....	1.95	1.94	-	1.47	1.52	1.75	.3	6.4	1.2
California.....	-	-	-	-	-	8.21	-	-	-
Colorado.....	8.47	7.68	7.32	6.14	6.20	4.08	10.2	8.1	8.4
Illinois.....	4.23	4.20	4.18	3.87	3.59	2.77	.8	4.2	4.8
Indiana.....	5.31	5.33	4.98	4.68	4.28	3.86	-4	5.5	3.6
Iowa.....	-	-	-	-	1.52	1.51	-	-	-
Kansas.....	7.49	3.82	2.17	2.22	1.93	2.66	96.1	40.3	12.2
Kentucky Total.....	3.73	3.94	3.80	3.57	3.25	2.78	-5.5	3.5	3.3
Eastern.....	3.64	3.83	3.68	3.47	3.24	2.58	-5.0	2.9	3.9
Western.....	4.05	4.38	4.29	3.97	3.28	3.62	-7.3	5.4	1.3
Louisiana.....	9.59	10.94	10.86	13.25	13.00	15.04	-12.4	-7.3	-4.9
Maryland.....	3.97	3.93	4.13	3.82	3.68	3.00	1.0	1.9	3.1
Missouri.....	2.49	3.19	3.49	2.55	3.59	3.43	-22.1	-8.8	-3.5
Montana.....	26.11	23.56	21.88	21.06	21.92	18.94	10.8	4.5	3.6
New Mexico.....	8.68	9.37	8.45	6.92	6.77	7.93	-7.4	6.4	1.0
North Dakota.....	17.36	17.82	17.20	16.80	18.84	15.69	-2.6	-2.0	1.1
Ohio.....	3.63	4.02	3.95	3.62	3.42	2.33	-9.6	1.5	5.1
Oklahoma.....	3.37	2.51	2.61	2.97	2.68	2.15	33.9	5.8	5.1
Pennsylvania Total.....	3.71	3.63	3.36	3.23	2.98	2.28	2.3	5.6	5.5
Anthracite.....	1.75	1.76	1.92	2.08	1.93	1.12	-6	-2.4	5.0
Bituminous.....	4.01	3.89	3.56	3.37	3.11	2.39	3.2	6.6	5.9
Tennessee.....	2.61	2.37	2.20	2.36	2.23	1.72	9.9	3.9	4.8
Texas.....	10.13	10.24	10.13	9.10	8.82	7.31	-1.1	3.5	3.7
Utah.....	6.42	6.34	7.23	7.02	6.59	4.75	1.4	-6	3.4
Virginia.....	2.76	2.77	2.72	2.50	2.51	2.21	-5	2.4	2.5
Washington.....	4.71	3.59	3.97	4.04	4.11	3.34	31.1	3.4	3.9
West Virginia Total.....	4.50	4.46	3.91	3.74	3.69	2.77	1.0	5.1	5.5
Northern.....	4.70	4.48	4.05	3.72	3.63	2.65	4.9	6.7	6.6
Southern.....	4.44	4.46	3.86	3.75	3.72	2.85	-3	4.5	5.0
Wyoming.....	39.16	34.55	32.06	30.06	26.05	20.28	13.3	10.7	7.6
Appalachian Total¹.....	3.72	3.76	3.48	3.32	3.20	2.49	-1.1	3.9	4.5
Interior Total¹.....	5.46	5.54	5.39	4.97	4.43	3.84	-1.4	5.4	4.0
Western Total¹.....	19.37	17.75	17.41	15.68	14.58	11.63	9.1	7.3	5.8
East of Miss. River.....	3.85	3.89	3.63	3.45	3.28	2.63	-1.2	4.0	4.3
West of Miss. River.....	17.39	16.04	15.66	14.18	13.22	10.21	8.4	7.1	6.1
U.S. Total.....	6.22	6.04	5.69	5.38	4.98	3.70	3.0	5.7	5.9

¹ For a definition of coal-producing regions, see Appendix C.

Notes: Productivity is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations, but excludes office workers. For 1997 and prior years, total also includes all technical and engineering personnel. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report"; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 49. Underground Coal Mining Productivity by State, 1989, 1994-1998

(Short Tons of Coal Produced per Miner per Hour)

Coal-Producing State and Region	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Alabama.....	2.17	2.21	1.95	2.02	1.94	2.00	-1.5	2.9	0.9
Arkansas.....	-	-	-	-	1.62	-	-	-	-
Colorado.....	8.27	7.44	6.67	5.86	5.81	2.91	11.1	9.2	12.3
Illinois.....	4.24	4.07	4.10	3.86	3.49	2.41	4.3	4.9	6.5
Indiana.....	3.62	3.74	3.09	3.22	2.82	2.47	-3.1	6.5	4.4
Iowa.....	-	-	-	-	-	2.06	-	-	-
Kentucky Total.....	3.42	3.64	3.53	3.25	2.89	2.54	-6.0	4.3	3.3
Eastern.....	3.28	3.47	3.37	3.12	2.87	2.40	-5.6	3.4	3.5
Western.....	3.83	4.15	4.05	3.70	2.96	3.13	-7.8	6.6	2.3
Maryland.....	4.78	5.17	4.82	4.77	4.52	3.09	-7.5	1.4	4.9
Montana.....	-	-	3.50	-	-	-	-	-	-
New Mexico.....	5.78	-	-	2.68	2.57	1.03	-	22.5	21.1
Ohio.....	3.61	4.18	4.19	3.81	3.51	2.00	-13.6	.7	6.8
Oklahoma.....	2.18	2.32	1.75	.74	1.70	1.28	-6.1	6.5	6.1
Pennsylvania Total.....	4.19	4.05	3.74	3.49	3.18	2.16	3.5	7.1	7.6
Anthracite.....	.94	1.03	.94	.86	.64	.71	-8.6	10.0	3.0
Bituminous.....	4.28	4.13	3.81	3.56	3.25	2.19	3.7	7.1	7.7
Tennessee.....	2.25	1.83	1.76	2.02	1.90	1.58	23.1	4.3	4.0
Utah.....	6.56	6.34	7.24	7.02	6.59	4.75	3.5	-1	3.6
Virginia.....	2.56	2.56	2.44	2.25	2.27	2.15	.1	3.1	2.0
West Virginia Total.....	4.13	4.03	3.50	3.40	3.38	2.59	2.6	5.1	5.3
Northern.....	4.72	4.35	3.98	3.66	3.61	2.61	8.4	6.9	6.8
Southern.....	3.89	3.90	3.29	3.27	3.25	2.57	-1	4.6	4.7
Wyoming.....	10.09	10.13	9.18	5.97	5.07	3.21	-4	18.8	13.6
Appalachian Total¹.....	3.55	3.55	3.24	3.08	2.96	2.34	.1	4.6	4.7
Interior Total¹.....	4.02	4.07	4.01	3.76	3.26	2.63	-1.3	5.4	4.8
Western Total¹.....	7.27	6.88	7.09	6.35	5.98	3.93	5.6	5.0	7.1
East of Miss. River.....	3.63	3.63	3.36	3.19	3.02	2.39	-1	4.7	4.8
West of Miss. River.....	7.18	6.82	7.03	6.32	5.93	3.92	5.3	4.9	7.0
U.S. Total.....	3.84	3.83	3.57	3.39	3.19	2.46	.3	4.7	5.1

¹ For a definition of coal-producing regions, see Appendix C.

Notes: Productivity is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations, but excludes office workers. For 1997 and prior years, total also includes all technical and engineering personnel. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report"; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 50. Surface Coal Mining Productivity by State, 1989, 1994-1998

(Short Tons of Coal Produced per Miner per Hour)

Coal-Producing State and Region	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Alabama.....	2.97	3.21	3.50	3.07	3.07	2.72	-7.4	-0.8	1.0
Alaska.....	5.45	6.41	6.81	7.46	6.94	7.73	-15.0	-5.8	-3.8
Arizona.....	6.43	6.79	6.30	6.34	6.71	6.25	-5.3	-1.0	.3
Arkansas.....	1.95	1.94	-	1.47	1.46	1.75	.3	7.4	1.2
California.....	-	-	-	-	-	8.21	-	-	-
Colorado.....	8.89	8.17	8.76	6.79	7.06	6.74	8.8	5.9	3.1
Illinois.....	4.16	5.11	4.67	3.89	4.12	3.96	-18.5	.2	.5
Indiana.....	5.58	5.59	5.34	5.04	4.56	4.04	-3	5.1	3.6
Iowa.....	-	-	-	-	1.52	1.48	-	-	-
Kansas.....	7.49	3.82	2.17	2.22	1.93	2.66	96.1	40.3	12.2
Kentucky Total.....	4.36	4.57	4.35	4.23	3.96	3.23	-4.5	2.4	3.4
Eastern.....	4.27	4.47	4.23	4.13	3.97	2.92	-4.4	1.8	4.3
Western.....	5.02	5.26	5.02	4.77	3.93	4.53	-4.4	6.3	1.1
Louisiana.....	9.59	10.94	10.86	13.25	13.00	15.04	-12.4	-7.3	-4.9
Maryland.....	2.21	2.02	2.56	2.16	2.18	2.90	9.3	.4	-3.0
Missouri.....	2.49	3.19	3.49	2.55	3.59	3.43	-22.1	-8.8	-3.5
Montana.....	26.11	23.56	22.34	21.06	21.92	18.94	10.8	4.5	3.6
New Mexico.....	8.71	9.37	8.45	7.19	7.18	8.03	-7.0	4.9	.9
North Dakota.....	17.36	17.82	17.20	16.80	18.84	15.69	-2.6	-2.0	1.1
Ohio.....	3.66	3.81	3.69	3.46	3.34	2.52	-4.0	2.3	4.2
Oklahoma.....	3.72	2.55	2.73	3.10	2.80	2.18	46.1	7.3	6.1
Pennsylvania Total.....	2.81	2.86	2.72	2.79	2.67	2.47	-1.6	1.3	1.4
Anthracite.....	1.87	1.87	2.06	2.30	2.13	1.19	-3	-3.2	5.1
Bituminous.....	3.28	3.28	2.97	2.95	2.84	2.76	.3	3.7	2.0
Tennessee.....	2.90	3.02	2.91	3.20	3.19	2.20	-4.1	-2.3	3.1
Texas.....	10.13	10.24	10.13	9.10	8.82	7.31	-1.1	3.5	3.7
Virginia.....	3.54	3.69	3.79	3.73	3.73	2.59	-4.0	-1.3	3.6
Washington.....	4.71	3.59	3.97	4.04	4.11	3.34	31.1	3.4	3.9
West Virginia Total.....	5.60	5.71	5.18	4.74	4.62	3.49	-1.9	4.9	5.4
Northern.....	4.55	5.54	4.72	4.31	3.78	2.88	-17.8	4.8	5.2
Southern.....	5.74	5.73	5.24	4.79	4.75	3.71	.2	4.9	5.0
Wyoming.....	39.79	35.42	32.84	31.02	27.37	21.38	12.3	9.8	7.1
Appalachian Total¹.....	4.11	4.26	4.05	3.88	3.72	2.84	-3.6	2.5	4.2
Interior Total¹.....	7.04	7.11	6.89	6.39	5.71	4.97	-1.0	5.3	3.9
Western Total¹.....	23.62	21.78	20.96	18.93	17.68	14.64	8.4	7.5	5.4
East of Miss. River.....	4.33	4.49	4.25	4.03	3.85	3.13	-3.5	3.0	3.7
West of Miss. River.....	20.15	18.63	17.89	16.23	15.19	11.86	8.1	7.3	6.1
U.S. Total.....	9.85	9.46	9.05	8.48	7.67	5.61	4.1	6.5	6.5

¹ For a definition of coal-producing regions, see Appendix C.

Notes: Productivity is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations, but excludes office workers. For 1997 and prior years, also includes hours for all technical and engineering personnel. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report"; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 51. Coal Mining Productivity by State and Mine Type, 1998

Coal-Producing State and Region	Number of Mining Operations ¹	Average Number of Miners Working Daily ²	Average Production per Miner per Hour (short tons) ³
Alabama	59	4,722	2.33
Underground	17	3,794	2.17
Surface	42	928	2.97
Alaska	1	104	5.45
Surface	1	104	5.45
Arizona	3	730	6.43
Surface	3	730	6.43
Arkansas	1	4	1.95
Surface	1	4	1.95
Colorado	15	1,684	8.47
Underground	11	1,126	8.27
Surface	4	558	8.89
Illinois	30	4,102	4.23
Underground	20	3,624	4.24
Surface	10	478	4.16
Indiana	45	2,807	5.31
Underground	7	385	3.62
Surface	38	2,422	5.58
Kansas	2	19	7.49
Surface	2	19	7.49
Kentucky Total	590	18,025	3.73
Underground	336	12,149	3.42
Surface	254	5,876	4.36
Eastern	535	14,617	3.64
Underground	305	9,453	3.28
Surface	230	5,164	4.27
Western	55	3,408	4.05
Underground	31	2,696	3.83
Surface	24	712	5.02
Louisiana	2	161	9.59
Surface	2	161	9.59
Maryland	13	433	3.97
Underground	3	284	4.78
Surface	10	149	2.21
Missouri	3	72	2.49
Surface	3	72	2.49
Montana	6	811	26.11
Surface	6	811	26.11
New Mexico	8	1,582	8.68
Underground	2	38	5.78
Surface	6	1,544	8.71
North Dakota	4	895	17.36
Surface	4	895	17.36
Ohio	86	3,199	3.63
Underground	15	1,718	3.61
Surface	71	1,481	3.66
Oklahoma	6	192	3.37
Underground	1	44	2.18
Surface	5	148	3.72
Pennsylvania Total	351	9,443	3.71
Underground	110	6,206	4.19
Surface	241	3,237	2.81
Anthracite	100	1,185	1.75
Underground	28	186	.94
Surface	72	999	1.87
Bituminous	251	8,258	4.01
Underground	82	6,020	4.28
Surface	169	2,238	3.28
Tennessee	31	517	2.61
Underground	16	273	2.25
Surface	15	244	2.90
Texas	14	2,382	10.13
Surface	14	2,382	10.13
Utah	19	1,919	6.42
Underground	18	1,894	6.56
Surface	1	25	.00
Virginia	194	5,734	2.76
Underground	141	4,626	2.56
Surface	53	1,108	3.54
Washington	2	480	4.71
Surface	2	480	4.71

See footnotes at end of table.

Table 51. Coal Mining Productivity by State and Mine Type, 1998 (Continued)

Coal-Producing State and Region	Number of Mining Operations ¹	Average Number of Miners Working Daily ²	Average Production per Miner per Hour (short tons) ³
West Virginia Total	435	17,167	4.50
Underground.....	299	13,148	4.13
Surface.....	136	4,019	5.60
Northern	82	4,139	4.70
Underground.....	48	3,627	4.72
Surface.....	34	512	4.55
Southern	353	13,028	4.44
Underground.....	251	9,521	3.89
Surface.....	102	3,507	5.74
Wyoming	23	4,073	39.16
Underground.....	1	82	10.09
Surface.....	22	3,991	39.79
Appalachian Total ⁴	1,704	55,832	3.72
Underground.....	906	39,502	3.55
Surface.....	798	16,330	4.11
Interior Total ⁴	158	13,147	5.46
Underground.....	59	6,749	4.02
Surface.....	99	6,398	7.04
Western Total ⁴	81	12,278	19.37
Underground.....	32	3,140	7.27
Surface.....	49	9,138	23.62
East of Miss. River	1,834	66,149	3.85
Underground.....	964	46,207	3.63
Surface.....	870	19,942	4.33
West of Miss. River	109	15,108	17.39
Underground.....	33	3,184	7.18
Surface.....	76	11,924	20.15
U.S. Total	1,943	81,257	6.22
Underground.....	997	49,391	3.84
Surface.....	946	31,866	9.85

¹ Mining operations that consist of a mine and preparation plant, or a preparation plant only processing both underground and surface coal will be counted as two operations.

² Includes all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations. Excludes office workers.

³ Calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations, but excludes office workers.

⁴ For a definition of coal-producing regions, see Appendix C.

Source: U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons of coal during the year, and preparation plants with less than 5,000 employee hours, which are not required to provide data.

Table 52. Underground Coal Mining Productivity by State and Mining Method, 1998
(Short Tons of Coal Produced per Miner per Hour)

Coal-Producing State and Region	Continuous ¹	Conventional ²	Longwall ³	Other ⁴	Total
Alabama	1.60	1.14	2.35	1.75	2.17
Colorado	4.06	—	9.65	—	8.27
Illinois	4.23	—	4.62	—	4.24
Indiana	3.74	—	—	—	3.62
Kentucky Total	3.62	2.67	4.48	2.18	3.42
Eastern	3.55	2.67	4.23	2.18	3.28
Western	3.82	—	4.67	—	3.83
Maryland	2.83	—	5.83	—	4.78
New Mexico	5.78	—	—	—	5.78
Ohio	4.12	—	3.57	—	3.61
Oklahoma	2.18	—	—	—	2.18
Pennsylvania Total	2.73	1.24	5.36	1.07	4.19
Anthracite	1.11	.88	—	1.07	0.94
Bituminous	2.78	1.32	5.36	—	4.28
Tennessee	2.51	1.37	—	—	2.25
Utah	4.06	3.58	7.46	—	6.56
Virginia	2.24	2.64	4.34	—	2.56
West Virginia Total	3.84	3.50	5.39	—	4.13
Northern	3.92	4.14	5.13	—	4.72
Southern	3.81	3.30	5.82	—	3.89
Wyoming	—	—	10.10	—	10.09
Appalachian Total⁵	3.37	2.84	4.44	1.80	3.55
Interior Total⁵	4.00	—	4.64	—	4.02
Western Total⁵	4.14	3.58	8.34	—	7.27
East of Miss. River	3.50	2.85	4.46	1.80	3.63
West of Miss. River	3.90	3.58	8.34	—	7.18
U.S. Total	3.53	2.93	4.89	1.80	3.84

¹ Mines that produce greater than 50 percent of coal by continuous mining method.

² Mines that produce greater than 50 percent of coal by conventional mining method, or mines that produce less than 10,000 short tons, which are not required to provide data.

³ Mines that have any production from longwall mining method. A typical longwall mining operation uses 80 percent longwall mining and 20 percent continuous mining.

⁴ Mines that produce coal using shortwall, scoop loading, hand loading, or other mining methods or a 50/50 percent continuous/conventional split in mining method.

⁵ For a definition of coal-producing regions, see Appendix C.

Source: U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Notes: For each State, stand alone preparation plant hours are distributed across the mining methods by the proportion of production for all stand alone mines. Productivity is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations, but excludes office workers. Excludes mines producing less than 10,000 short tons of coal during the year, and preparation plants with less than 5,000 employee hours, which are not required to provide data.

Table 53. U.S. Coal Mining Productivity by Coalbed Thickness and Mining Method, 1998

(Short Tons of Coal Produced per Miner per Hour)

Coalbed Thickness (inches)	Underground				Surface	Total
	Continuous ¹	Conventional ²	Longwall ³	Other ⁴		
< 7	-	-	-	-	3.24	3.24
7-12	5.65	-	-	-	4.92	4.96
13-18	-	-	-	-	5.22	5.22
19-24	1.99	1.68	-	2.13	5.15	5.10
25-30	2.27	2.53	-	2.95	5.06	4.74
31-36	3.36	3.13	8.11	1.79	5.09	4.35
37-42	3.22	3.15	2.63	-	5.30	4.43
43-48	3.90	3.13	3.21	1.59	5.17	4.38
49-54	3.85	2.93	3.30	1.75	6.68	5.00
55-60	4.45	5.58	4.03	-	5.91	5.01
61-66	3.87	1.12	6.54	-	6.57	5.87
67-72	4.61	1.84	4.92	-	6.64	5.48
73-78	4.35	-	4.77	-	7.68	5.54
79-84	4.88	1.26	4.97	-	8.42	6.53
85-90	5.25	-	5.04	-	7.56	6.65
91-96	4.76	5.92	5.03	1.62	6.91	5.33
97-102	5.40	-	6.72	-	8.58	8.35
103-108	4.26	-	13.02	-	9.95	9.43
109-114	4.82	-	8.45	-	7.70	8.04
115-120	6.55	-	11.30	-	5.48	6.32
> 120	7.08	1.22	9.24	-	21.09	19.79
U.S. Total⁵	3.53	2.93	4.89	1.80	9.85	6.22

¹ Mines that produce greater than 50 percent of coal by continuous mining method.² Mines that produce greater than 50 percent of coal by conventional mining method, or mines that produce less than 10,000 short tons, which are not required to provide data.³ Mines that have any production from longwall mining method. A typical longwall mining operation uses 80 percent longwall mining and 20 percent continuous mining.⁴ Mines that produce coal using shortwall, scoop loading, hand loading, or other mining methods or a 50/50 percent continuous/conventional split in mining method.⁵ Includes stand alone preparation plants.

Notes: Productivity is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations, but excludes office workers. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons and preparation plants with less than 5,000 employee hours, which are not required to provide data.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 54. Coal Mining Productivity by State, Mine Type, and Mine Production Range, 1998

(Short Tons of Coal Produced per Miner per Hour)

Coal-Producing State and Region	Mine Production Range (thousand short tons)						Total ¹
	1,000 and over	500 to 1,000	200 to 500	100 to 200	50 to 100	10 to 50	
Alabama	2.35	3.60	2.89	3.22	3.10	1.93	2.33
Underground.....	2.32	—	1.95	—	—	1.15	2.17
Surface.....	3.08	3.60	3.19	3.22	3.10	2.35	2.97
Alaska	5.45	—	—	—	—	—	5.45
Surface.....	5.45	—	—	—	—	—	5.45
Arizona	6.90	—	—	—	—	—	6.43
Surface.....	6.90	—	—	—	—	—	6.43
Arkansas	—	—	—	—	—	1.95	1.95
Surface.....	—	—	—	—	—	1.95	1.95
Colorado	9.25	—	3.57	—	—	—	8.47
Underground.....	9.37	—	3.07	—	—	—	8.27
Surface.....	9.02	—	6.28	—	—	—	8.89
Illinois	4.61	5.40	3.89	—	—	.13	4.23
Underground.....	4.57	6.83	1.63	—	—	—	4.24
Surface.....	5.66	4.94	4.97	—	—	.13	4.16
Indiana	5.54	5.71	4.48	4.39	3.18	1.54	5.31
Underground.....	3.82	—	5.72	—	—	—	3.62
Surface.....	5.88	5.71	4.29	4.39	3.18	1.54	5.58
Kansas	—	—	—	7.49	—	—	7.49
Surface.....	—	—	—	7.49	—	—	7.49
Kentucky Total	5.13	4.87	3.93	2.94	2.67	2.47	3.73
Underground.....	4.71	4.36	3.73	2.87	2.39	2.23	3.42
Surface.....	7.02	5.56	4.23	3.10	3.88	2.71	4.36
Eastern	5.49	4.97	3.87	2.92	2.63	2.48	3.64
Underground.....	4.73	4.51	3.74	2.87	2.39	2.23	3.28
Surface.....	7.02	5.62	4.06	3.03	3.70	2.73	4.27
Western	4.69	4.51	4.57	4.58	10.73	2.02	4.05
Underground.....	4.69	3.68	3.65	—	—	—	3.83
Surface.....	—	5.35	5.78	4.58	10.73	2.02	5.02
Louisiana	8.61	12.95	—	—	—	—	9.59
Surface.....	8.61	12.95	—	—	—	—	9.59
Maryland	6.66	—	3.01	2.04	2.17	3.35	3.97
Underground.....	6.66	—	3.01	—	—	—	4.78
Surface.....	—	—	—	2.04	2.17	3.35	2.21
Missouri	—	—	—	2.48	—	2.53	2.49
Surface.....	—	—	—	2.48	—	2.53	2.49
Montana	26.14	—	22.87	—	—	—	26.11
Surface.....	26.14	—	22.87	—	—	—	26.11
New Mexico	8.71	—	6.18	—	—	—	8.68
Underground.....	—	—	6.18	—	—	—	5.78
Surface.....	8.71	—	—	—	—	—	8.71
North Dakota	17.36	—	—	—	—	—	17.36
Surface.....	17.36	—	—	—	—	—	17.36
Ohio	3.62	5.21	3.97	3.49	3.39	2.73	3.63
Underground.....	3.67	—	4.21	—	—	—	3.61
Surface.....	3.37	5.21	3.91	3.49	3.39	2.73	3.66
Oklahoma	—	5.66	2.56	2.95	3.39	—	3.37
Underground.....	—	—	2.18	—	—	—	2.18
Surface.....	—	5.66	2.80	2.95	3.39	—	3.72
Pennsylvania Total	5.62	2.81	4.23	3.43	2.82	2.61	3.71
Underground.....	5.64	2.27	4.19	2.98	2.29	1.43	4.19
Surface.....	5.25	3.67	4.25	3.69	2.98	2.91	2.81
Anthracite	—	15.10	2.57	3.15	1.66	2.41	1.75
Underground.....	—	—	—	1.70	—	1.28	.94
Surface.....	—	15.10	2.57	3.63	1.66	2.95	1.87
Bituminous	5.62	2.51	4.51	3.53	3.25	2.72	4.01
Underground.....	5.64	2.27	4.19	3.25	2.29	1.64	4.28
Surface.....	5.25	2.92	4.86	3.71	3.69	2.90	3.28
Tennessee	—	4.04	4.03	3.55	2.38	1.75	2.61
Underground.....	—	—	5.49	3.48	2.41	1.66	2.25
Surface.....	—	4.04	3.69	3.76	2.34	1.94	2.90
Texas	10.32	—	3.60	—	—	—	10.13
Surface.....	10.32	—	3.60	—	—	—	10.13
Utah	7.63	3.56	6.14	3.62	1.85	—	6.42
Underground.....	7.63	3.56	6.14	3.62	1.85	—	6.56
Surface.....	—	—	—	—	—	—	.00

See footnotes at end of table.

Table 54. Coal Mining Productivity by State, Mine Type, and Mine Production Range, 1998
(Continued)
 (Short Tons of Coal Produced per Miner per Hour)

Coal-Producing State and Region	Mine Production Range (thousand short tons)						Total ¹
	1,000 and over	500 to 1,000	200 to 500	100 to 200	50 to 100	10 to 50	
Virginia	4.36	4.35	3.16	2.60	2.34	1.98	2.76
Underground	4.36	3.86	2.93	2.49	2.29	1.76	2.56
Surface	—	5.11	3.75	3.12	2.79	4.89	3.54
Washington	4.76	—	—	—	—	1.16	4.71
Surface	4.76	—	—	—	—	1.16	4.71
West Virginia Total	6.22	5.06	4.63	3.58	3.28	2.93	4.50
Underground	5.78	4.46	4.67	3.52	3.22	2.61	4.13
Surface	7.28	7.26	4.50	3.78	3.61	3.68	5.60
Northern	5.24	5.38	4.16	3.90	3.52	3.42	4.70
Underground	5.09	4.64	4.65	3.84	3.95	4.01	4.72
Surface	9.73	8.41	3.01	4.13	3.35	3.33	4.55
Southern	6.87	5.01	4.74	3.50	3.24	2.84	4.44
Underground	6.60	4.43	4.67	3.44	3.18	2.57	3.89
Surface	7.17	7.11	4.99	3.70	4.09	3.98	5.74
Wyoming	40.15	16.35	5.81	—	2.44	.93	39.16
Underground	10.09	—	—	—	—	—	10.09
Surface	40.83	16.35	5.81	—	2.44	.93	39.79
Appalachian Total ²	5.02	4.58	3.92	3.11	2.77	2.49	3.72
Underground	4.68	4.07	3.86	2.98	2.58	2.02	3.55
Surface	6.57	5.42	4.02	3.35	3.11	2.87	4.11
Interior Total ²	6.17	5.16	4.05	3.92	4.26	.83	5.46
Underground	4.57	3.98	3.23	—	—	—	4.02
Surface	8.28	5.66	4.47	3.92	4.26	.83	7.04
Western Total ²	20.64	5.58	5.00	3.62	2.05	.98	19.37
Underground	8.39	3.56	4.08	3.62	1.85	—	7.27
Surface	24.16	16.35	7.75	—	2.44	.98	23.62
East of Miss. River	4.98	4.64	3.96	3.13	2.79	2.38	3.85
Underground	4.65	4.06	3.84	2.98	2.58	2.02	3.63
Surface	6.32	5.43	4.12	3.38	3.14	2.64	4.33
West of Miss. River	18.71	6.19	4.07	3.63	2.38	1.37	17.39
Underground	8.39	3.56	3.67	3.62	1.85	—	7.18
Surface	21.00	11.53	4.52	3.64	2.91	1.37	20.15
U.S. Total	9.36	4.69	3.96	3.14	2.78	2.36	6.22
Underground	5.01	4.04	3.83	2.98	2.57	2.02	3.84
Surface	15.98	5.59	4.14	3.39	3.14	2.60	9.85

¹ Includes stand alone preparation plants.

² For a definition of coal-producing regions, see Appendix C.

Source: U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Notes: Productivity is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations, but excludes office workers. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons and preparation plants with less than 5,000 employee hours, which are not required to provide data.

Table 55. Coal Mining Productivity by State, Mine Type, and Union Type, 1998
(Short Tons of Coal Produced per Miner per Hour)

Coal-Producing State and Region	UMWA	Other Unions	Union Total	Nonunion	Total
Alabama	2.30	—	2.30	2.41	2.33
Underground.....	2.22	—	2.22	2.01	2.17
Surface.....	3.03	—	3.03	2.93	2.97
Alaska	—	5.45	5.45	—	5.45
Surface.....	—	5.45	5.45	—	5.45
Arizona	6.43	—	6.43	—	6.43
Surface.....	6.43	—	6.43	—	6.43
Arkansas	—	—	—	1.95	1.95
Surface.....	—	—	—	1.95	1.95
Colorado	7.29	7.78	7.47	8.75	8.47
Underground.....	6.72	—	6.72	8.45	8.27
Surface.....	7.89	7.78	7.83	9.83	8.89
Illinois	4.27	3.50	4.16	4.36	4.23
Underground.....	4.38	3.17	4.23	4.25	4.24
Surface.....	3.30	4.64	3.65	5.28	4.16
Indiana	5.02	—	5.02	5.47	5.31
Underground.....	—	—	—	3.62	3.62
Surface.....	5.02	—	5.02	5.97	5.58
Kansas	—	—	—	7.49	7.49
Surface.....	—	—	—	7.49	7.49
Kentucky Total	3.56	2.19	3.54	3.74	3.73
Underground.....	3.16	2.19	3.14	3.45	3.42
Surface.....	6.58	—	6.58	4.28	4.36
Eastern	3.75	2.19	3.66	3.64	3.64
Underground.....	1.96	2.19	1.98	3.32	3.28
Surface.....	7.14	—	7.14	4.18	4.27
Western	3.50	—	3.50	4.33	4.05
Underground.....	3.45	—	3.45	4.08	3.83
Surface.....	4.80	—	4.80	5.04	5.02
Louisiana	—	—	—	9.59	9.59
Surface.....	—	—	—	9.59	9.59
Maryland	—	—	—	3.97	3.97
Underground.....	—	—	—	4.78	4.78
Surface.....	—	—	—	2.21	2.21
Missouri	—	—	—	2.49	2.49
Surface.....	—	—	—	2.49	2.49
Montana	19.79	24.78	22.27	48.56	26.11
Surface.....	19.79	24.78	22.27	48.56	26.11
New Mexico	7.77	8.72	8.35	10.71	8.68
Underground.....	—	—	—	6.18	5.78
Surface.....	7.77	8.73	8.35	11.05	8.71
North Dakota	12.30	14.12	13.25	18.94	17.36
Surface.....	12.30	14.12	13.25	18.94	17.36
Ohio	3.55	—	3.55	3.73	3.63
Underground.....	3.60	—	3.60	3.69	3.61
Surface.....	3.34	—	3.34	3.74	3.66
Oklahoma	—	—	—	3.37	3.37
Underground.....	—	—	—	2.18	2.18
Surface.....	—	—	—	3.72	3.72
Pennsylvania Total	3.25	1.19	3.25	4.22	3.71
Underground.....	3.60	—	3.59	5.41	4.19
Surface.....	1.44	2.40	1.45	3.24	2.81
Anthracite	1.07	1.81	1.09	2.36	1.75
Underground.....	—	—	—	.98	.94
Surface.....	1.08	2.79	1.10	2.78	1.87
Bituminous	3.55	—	3.54	4.54	4.01
Underground.....	3.60	—	3.59	5.77	4.28
Surface.....	2.52	—	2.51	3.36	3.28
Tennessee	—	—	—	2.61	2.61
Underground.....	—	—	—	2.25	2.25
Surface.....	—	—	—	2.90	2.90
Texas	—	8.78	8.78	12.17	10.13
Surface.....	—	8.78	8.78	12.17	10.13
Utah	7.13	—	7.13	6.19	6.42
Underground.....	7.13	—	7.13	6.36	6.56
Surface.....	—	—	—	—	—
Virginia	3.00	3.22	3.04	2.69	2.76
Underground.....	3.00	2.90	2.99	2.44	2.56
Surface.....	—	3.95	3.86	3.53	3.54
Washington	—	4.76	4.76	1.16	4.71
Surface.....	—	4.76	4.76	1.16	4.71

See footnotes at end of table.

Table 55. Coal Mining Productivity by State, Mine Type, and Union Type, 1998 (Continued)
(Short Tons of Coal Produced per Miner per Hour)

Coal-Producing State and Region	UMWA	Other Unions	Union Total	Nonunion	Total
West Virginia Total	4.10	—	4.08	4.96	4.50
Underground	3.74	—	3.74	4.64	4.13
Surface	5.67	—	5.52	5.65	5.60
Northern	5.17	—	5.17	3.96	4.70
Underground	5.17	—	5.17	3.69	4.72
Surface	—	—	—	4.55	4.55
Southern	3.65	—	3.62	5.22	4.44
Underground	2.92	—	2.92	4.88	3.89
Surface	5.67	—	5.52	5.92	5.74
Wyoming	8.19	10.36	9.56	46.47	39.16
Underground	—	—	—	10.09	10.09
Surface	8.19	10.36	9.56	47.46	39.79
Appalachian Total ¹	3.50	2.43	3.48	3.86	3.72
Underground	3.37	2.58	3.36	3.70	3.55
Surface	4.20	2.20	4.13	4.10	4.11
Interior Total ¹	4.25	7.64	5.18	5.71	5.46
Underground	4.05	3.17	3.98	4.06	4.02
Surface	4.72	8.55	6.68	7.32	7.04
Western Total ¹	8.87	10.51	9.64	26.96	19.37
Underground	7.05	—	7.04	7.32	7.27
Surface	9.37	10.51	9.98	38.69	23.62
East of Miss. River	3.64	3.06	3.63	3.98	3.85
Underground	3.48	2.97	3.47	3.76	3.63
Surface	4.35	3.27	4.31	4.34	4.33
West of Miss. River	8.87	9.86	9.45	23.92	17.39
Underground	7.05	—	7.04	7.21	7.18
Surface	9.37	9.86	9.69	31.56	20.15
U.S. Total	4.14	8.84	4.79	7.16	6.22
Underground	3.58	2.96	3.56	4.06	3.84
Surface	5.91	9.53	7.25	11.15	9.85

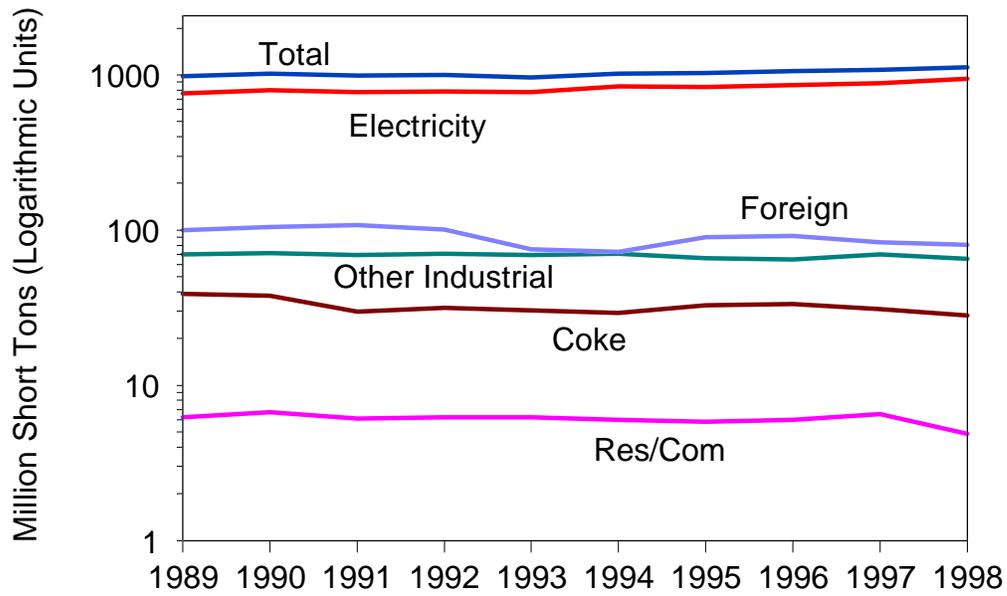
¹ For a definition of coal-producing regions, see Appendix C.

Notes: Productivity is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations, but excludes office workers. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons and preparation plants with less than 5,000 employee hours, which are not required to provide data. See Glossary for listing of other unions.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Distribution

Figure 8. Coal Distribution, 1989-1998



Source: Energy Information Administration, Form EIA-6, "Coal Distribution Report."

Table 56. Distribution of U.S. Coal by State of Origin, 1994-1998
(Thousand Short Tons)

Coal-Producing State and Region	1998	1997	1996	1995	1994	Percent Change 1997-1998	Average Annual Percent Change
							1994-1998
Alabama	23,046	23,921	24,636	25,159	23,750	-3.7	-0.8
Alaska	1,341	1,424	1,473	1,670	1,505	-5.8	-2.9
Arizona	12,169	11,044	10,970	11,783	12,011	10.2	.3
Arkansas	23	9	7	11	28	148.9	-5.0
Colorado	29,294	R 26,968	25,405	25,635	24,810	8.6	4.2
Illinois	39,754	41,220	47,076	47,869	51,973	-3.6	-6.5
Indiana	36,774	34,810	29,674	25,695	30,684	5.6	4.6
Iowa	-	-	-	-	46	-	-
Kansas	440	434	245	291	282	1.5	11.8
Kentucky Total	153,102	R 152,746	152,891	151,466	159,130	.2	-1.0
Eastern	120,227	R 119,196	117,404	117,831	124,257	.9	-8
Western	32,876	33,550	35,487	33,635	34,873	-2.0	-1.5
Louisiana	3,331	3,545	3,222	3,426	3,463	-6.0	-1.0
Maryland	4,066	4,116	4,199	3,570	3,460	-1.2	4.1
Missouri	296	401	846	464	679	-26.0	-18.7
Montana	42,674	40,942	38,288	39,620	41,916	4.2	.4
New Mexico	28,026	27,377	25,043	26,154	28,570	2.4	-5
North Dakota	30,557	29,172	30,025	30,118	32,056	4.8	-1.2
Ohio	27,166	29,434	28,881	24,345	28,749	-7.7	-1.4
Oklahoma	1,731	1,688	2,216	2,158	1,925	2.6	-2.6
Pennsylvania Total	80,525	73,725	69,128	62,240	61,508	9.2	7.0
Anthracite	4,887	5,062	4,836	3,994	4,700	-3.4	1.0
Bituminous	75,637	68,664	64,291	58,246	56,808	10.2	7.4
Tennessee	2,741	R 3,080	3,052	2,627	2,547	-11.0	1.8
Texas	52,935	53,463	49,655	52,832	52,256	-1.0	.3
Utah	26,765	26,272	23,868	25,521	23,225	1.9	3.6
Virginia	33,539	R 35,577	36,208	34,024	38,548	-5.7	-3.4
Washington	4,622	4,495	4,569	4,863	4,877	2.8	-1.3
West Virginia Total	172,612	R 172,236	169,200	165,187	158,985	.2	2.1
Northern	44,784	46,316	46,436	42,615	45,535	-3.3	-4
Southern	127,828	R 125,920	122,764	122,572	113,449	1.5	3.0
Wyoming	314,891	280,795	279,117	263,601	235,540	12.1	7.5
Appalachian Total¹	463,922	R 461,287	452,707	434,984	441,805	.6	1.2
Interior Total¹	168,160	R 169,119	168,427	166,380	176,208	-.6	-1.2
Western Total¹	490,339	R 448,490	438,758	428,966	404,510	9.3	4.9
East of Miss. River	573,325	R 570,866	564,944	542,182	559,334	.4	.6
West of Miss. River	549,096	R 508,030	494,948	488,148	463,190	8.1	4.3
U.S. Total	1,122,421	R 1,078,896	1,059,892	1,030,330	1,022,523	4.0	2.4

¹ For a definition of coal-producing regions, see Appendix C.

R Revised Data.

Notes: See Technical Note 1 for the difference between production and distribution. Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, Form EIA-6A, "Coal Distribution Report."

Table 57. Domestic and Foreign Distribution of U.S. Coal by State of Origin, 1994-1998
(Thousand Short Tons)

Coal-Producing State and Region	1998	1997	1996	1995	1994	Percent Change 1997-1998	Average Annual Percent Change
							1994-1998
Domestic							
Alabama	18,245	18,108	19,772	19,127	19,220	0.8	-1.3
Alaska	970	743	697	815	789	30.4	5.3
Arizona	12,169	11,044	10,970	11,783	12,011	10.2	.3
Arkansas	23	9	7	11	28	148.9	-5.0
Colorado	27,541	25,445	23,990	24,734	24,059	8.2	3.4
Illinois	39,447	40,447	45,190	45,170	51,737	-2.5	-6.6
Indiana	36,774	34,805	29,664	25,625	30,477	5.7	4.8
Iowa	-	-	-	-	46	-	-
Kansas	440	434	245	291	282	1.5	11.8
Kentucky Total	146,171	R 145,526	143,748	141,771	151,963	.4	-1.0
Eastern	113,842	R 112,496	108,927	108,781	117,234	1.2	-7
Western	32,329	33,030	34,821	32,990	34,729	-2.1	-1.8
Louisiana	3,331	3,545	3,222	3,426	3,463	-6.0	-1.0
Maryland	4,058	3,880	3,555	3,382	3,277	4.6	5.5
Missouri	296	401	846	464	679	-26.0	-18.7
Montana	41,860	40,363	37,770	39,362	41,672	3.7	.1
New Mexico	28,026	27,352	25,035	25,640	28,540	2.5	-4
North Dakota	30,557	29,172	30,025	30,118	32,056	4.8	-1.2
Ohio	26,503	29,024	28,609	24,318	28,688	-8.7	-2.0
Oklahoma	1,731	1,688	2,136	2,158	1,925	2.6	-2.6
Pennsylvania Total	72,616	65,027	59,882	53,961	55,207	11.7	7.1
Anthracite	4,445	4,575	4,330	3,497	4,346	-2.9	.6
Bituminous	68,172	R 60,452	55,552	50,464	50,861	12.8	7.6
Tennessee	2,741	R 3,080	3,052	2,627	2,547	-11.0	1.8
Texas	52,913	53,463	49,538	52,812	52,256	-1.0	.3
Utah	24,229	22,857	18,563	21,591	20,527	6.0	4.2
Virginia	20,728	R 22,736	22,776	24,283	26,866	-8.8	-6.3
Washington	4,622	R 4,481	4,526	4,756	4,731	3.2	-6
West Virginia Total	135,082	R 133,777	127,156	120,866	122,779	1.0	2.4
Northern	40,410	41,494	40,398	36,073	39,985	-2.6	.3
Southern	94,671	R 92,284	86,757	84,793	82,794	2.6	3.4
Wyoming	311,162	278,255	276,723	261,333	234,016	11.8	7.4
Appalachian Total¹	393,814	R 388,130	373,728	357,344	375,819	1.5	1.2
Interior Total¹	167,285	167,821	165,668	162,947	175,622	-.3	-1.2
Western Total¹	481,137	439,713	428,297	420,132	398,402	9.4	4.8
East of Miss. River	502,364	R 496,412	483,402	461,128	492,762	1.2	.5
West of Miss. River	539,872	499,252	484,291	479,294	457,081	8.1	4.3
U.S. Total	1,042,236	R 995,664	967,693	940,423	949,843	4.7	2.3
Foreign							
Alabama	4,801	5,813	4,864	6,032	4,529	-17.4	1.5
Alaska	371	R 680	776	855	716	-45.5	-15.2
Colorado	1,754	R 1,523	1,415	900	752	15.1	23.6
Illinois	307	773	1,886	2,699	236	-60.3	6.7
Indiana	-	5	11	70	206	-100.0	-
Kentucky Total	6,931	7,220	9,143	9,695	7,167	-4.0	-8
Eastern	6,385	6,700	8,477	9,051	7,023	-4.7	-2.3
Western	546	520	666	645	144	5.0	39.6
Maryland	9	236	645	188	184	-96.2	-53.1
Montana	814	579	518	259	243	40.6	35.3
New Mexico	-	25	9	514	30	-100.0	-
Ohio	663	410	271	28	61	61.5	81.7
Oklahoma	-	-	80	-	-	-	-
Pennsylvania Total	7,908	8,698	9,246	8,279	6,301	-9.1	5.8
Anthracite	443	486	506	497	354	-8.9	5.7
Bituminous	7,466	8,212	8,740	7,782	5,947	-9.1	5.8
Texas	22	-	117	20	-	-	-
Utah	2,535	3,414	5,305	3,930	2,698	-25.8	-1.5
Virginia	12,810	12,841	13,432	9,742	11,683	-2	2.3
Washington	-	14	43	107	146	-100.0	-
West Virginia Total	37,531	38,459	42,044	44,321	36,205	-2.4	.9
Northern	4,374	4,822	6,038	6,542	5,550	-9.3	-5.8
Southern	33,157	33,637	36,006	37,779	30,655	-1.4	2.0
Wyoming	3,729	2,541	2,395	2,269	1,524	46.8	25.1
Appalachian Total¹	70,108	73,157	78,979	77,640	65,986	-4.2	1.5
Interior Total¹	875	1,298	2,759	3,433	586	-32.6	10.5

See footnotes at end of table.

Table 57. Domestic and Foreign Distribution of U.S. Coal by State of Origin, 1994-1998 (Continued)
(Thousand Short Tons)

Coal-Producing State and Region	1998	1997	1996	1995	1994	Percent Change 1997-1998	Average Annual Percent Change
							1994-1998
Foreign							
Western Total ¹	9,202	^R 8,777	10,460	8,834	6,108	4.8	10.8
East of Miss. River.....	70,961	74,455	81,542	81,054	66,572	-4.7	1.6
West of Miss. River.....	9,225	^R 8,777	10,657	8,854	6,108	5.1	10.8
U.S. Total.....	80,185	^R 83,232	92,199	89,907	72,680	-3.7	2.5

¹ For a definition of coal-producing regions, see Appendix C.

^R Revised Data.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, Form EIA-6A, "Coal Distribution Report."

Table 58. Major U.S. Coal Distributors, 1998

Company Name	
Top Ten Distributors	
Atlantic Richfield Co.	Kennecott Energy Co.
Arch Mineral Corp.	Kerr-McGee Coal Corp.
A.T. Massey Coal Co., Inc.	Peabody Holding Co.
Consol Energy Inc.	Texas Utilities Co.
Cyprus AMAX Minerals Co.	Zeigler Coal Holding Co.
Other Major Distributors	
Addington Enterprises Inc.	Mapco Coal Inc.
AEP Service Corp.	MDU Resources
Aluminum Co. of America	Minicorp Inc.
American Metals & Coal	Minnesota Power & Light
AMVEST Minerals	Montana Power Co.
Andalex Resources Inc.	North American Coal Corp.
Anker Energy Corp.	Orion Resources Inc.
BHP Minerals Int'l	Pacific Basin Resources
Black Beauty Coal Co.	Pacificorp Electric
Black Hills Corp.	Pardee Coal Co. Inc.
Blue Diamond Coal Co.	Pen Holdings
Canyon Fuel Co.	Peter Kiewit Sons' Inc.
Chevron Corp.	Quaker Coal Co.
Coal Resources Inc.	Renco Group Inc.
Coastal Corp.	Rochester & Pittsburgh Coal
Diversified Energy Inc.	San Miguel Electric CoOp
Dolet Hills Mining Venture	Smokey Mountain Coal
Drummond Co.	Solar Sources Inc.
Electric Fuels Corp.	Sun Coal Co.
Exxon Coal USA Inc.	Teco Coal Corp.
General Dynamics Corp.	Thames Development LTD
Hanson PLC	U.S. Steel Mining Co.
James River Coal Co.	United Coal Co.
Jim Walters Resources Inc.	Western Fuels Association
Kindall Mining	Westmoreland Resources Inc.

Notes: The top 10 distribution companies accounted for 53 percent of the total distribution. Companies are listed in alphabetical order to ensure nondisclosure of company data.

Source: Energy Information Administration, Form EIA-6A, "Coal Distribution Report."

Table 59. Domestic Distribution of U.S. Coal by Coal-Producing Region and State, and Destination Census Division and State, 1994-1998
(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1998	1997	1996	1995	1994	Percent Change 1997-1998	Average Annual Percent Change
							1994-1998
Appalachian Total	393,814	^R 388,130	373,728	357,344	375,819	1.5	1.2
Alabama	18,245	18,108	19,772	19,127	19,220	.8	-1.3
Middle Atlantic.....	-	365	579	616	496	-100.0	-
Pennsylvania.....	-	365	579	616	496	-100.0	-
East North Central.....	129	-	108	-	-	-	-
Illinois.....	71	-	-	-	-	-	-
Indiana.....	58	-	57	-	-	-	-
Ohio.....	-	-	51	-	-	-	-
West North Central.....	-	-	*	-	-	-	-
Minnesota.....	-	-	*	-	-	-	-
Missouri.....	-	-	*	-	-	-	-
South Atlantic.....	98	77	385	253	89	28.6	2.6
Florida.....	24	26	8	115	85	-7.5	-26.8
Georgia.....	74	50	373	134	*	47.7	296.6
North Carolina.....	-	-	4	-	-	-	-
South Carolina.....	-	-	-	4	3	-	-
East South Central.....	17,904	17,594	18,628	18,182	18,484	1.8	-8
Alabama.....	17,831	17,489	18,503	18,024	18,351	1.9	-7
Kentucky.....	-	-	15	-	-	-	-
Mississippi.....	73	105	110	156	129	-30.1	-13.2
Tennessee.....	-	-	1	2	4	-	-
West South Central.....	78	47	39	24	63	65.4	5.8
Arkansas.....	78	47	39	24	60	65.4	7.1
Texas.....	-	-	-	-	3	-	-
Kentucky, Eastern	113,842	^R 112,496	108,927	108,781	117,234	1.2	-7
New England.....	896	1,884	1,337	1,764	1,447	-52.4	-11.3
Connecticut.....	460	755	659	811	787	-39.1	-12.6
Maine.....	194	412	271	258	433	-53.0	-18.2
Massachusetts.....	243	717	407	695	227	-66.1	1.7
Middle Atlantic.....	2,584	2,754	3,977	4,145	4,522	-6.2	-13.0
New Jersey.....	-	91	29	381	63	-100.0	-
New York.....	1,818	1,494	1,227	996	1,288	21.7	9.0
Pennsylvania.....	766	1,169	2,721	2,767	3,171	-34.5	-29.9
East North Central.....	20,641	21,644	20,340	22,832	24,669	-4.6	-4.4
Illinois.....	661	2,327	1,478	1,442	1,555	-71.6	-19.3
Indiana.....	2,753	2,065	1,962	2,397	2,109	33.3	6.9
Michigan.....	7,413	6,759	6,671	6,977	9,524	9.7	-6.1
Ohio.....	9,074	9,711	9,490	11,200	10,532	-6.6	-3.7
Wisconsin.....	740	781	738	816	949	-5.3	-6.0
West North Central.....	499	543	889	611	564	-8.0	-3.0
Iowa.....	234	259	439	160	40	-9.9	55.3
Minnesota.....	89	136	135	211	172	-34.6	-15.2
Missouri.....	170	145	315	238	351	17.7	-16.6
Nebraska.....	-	-	-	3	-	-	-
South Dakota.....	7	3	-	-	1	108.6	71.3
South Atlantic.....	66,795	65,034	63,554	57,820	60,914	2.7	2.3
Delaware.....	92	-	-	-	37	-	25.4
District of Columbia.....	-	-	-	-	13	-	-
Florida.....	13,902	14,342	14,015	12,121	12,069	-3.1	3.6
Georgia.....	16,507	15,913	14,689	15,803	15,649	3.7	1.3
Maryland.....	349	139	105	29	423	150.2	-4.7
North Carolina.....	17,179	15,840	17,240	12,902	13,590	8.5	6.0
South Carolina.....	13,060	12,100	11,417	10,007	11,443	7.9	3.4
Virginia.....	5,336	6,449	5,662	6,129	6,539	-17.3	-5.0
West Virginia.....	370	250	426	829	1,151	47.9	-24.7
East South Central.....	22,110	^R 20,070	18,182	20,332	22,813	10.2	-8
Alabama.....	1,039	727	727	1,434	2,402	42.9	-18.9
Kentucky.....	10,740	^R 8,645	9,326	9,653	10,317	24.2	1.0
Mississippi.....	977	1,219	928	815	1,006	-19.8	-7
Tennessee.....	9,355	9,480	7,202	8,430	9,088	-1.3	.7
West South Central.....	38	116	71	513	802	-67.8	-53.5
Arkansas.....	-	-	-	-	*	-	-
Louisiana.....	11	78	44	500	791	-86.1	-65.8
Oklahoma.....	27	*	2	4	-	NM	-
Texas.....	-	38	26	8	10	-100.0	-
Mountain.....	-	-	-	2	10	-	-
Idaho.....	-	-	-	2	-	-	-
Wyoming.....	-	-	-	-	10	-	-

See footnotes at end of table.

Table 59. Domestic Distribution of U.S. Coal by Coal-Producing Region and State, and Destination Census Division and State, 1994-1998 (Continued)
(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1998	1997	1996	1995	1994	Percent Change 1997-1998	Average Annual Percent Change
							1994-1998
Kentucky, Eastern (Continued)							
Pacific.....	14	16	24	15	15	-12.0	-0.5
Oregon.....	14	16	24	15	15	-12.0	-5
Maryland.....	4,058	3,880	3,555	3,382	3,277	4.6	5.5
New England.....	-	-	3	32	-	-	-
Connecticut.....	-	-	3	32	-	-	-
Massachusetts.....	-	-	*	-	-	-	-
Middle Atlantic.....	16	24	4	45	-	-31.8	-
Pennsylvania.....	16	24	4	45	-	-31.8	-
East North Central.....	-	-	19	-	-	-	-
Michigan.....	-	-	15	-	-	-	-
Wisconsin.....	-	-	3	-	-	-	-
South Atlantic.....	4,022	3,847	3,518	3,297	3,277	4.6	5.3
Delaware.....	96	-	130	97	125	-	-6.5
Maryland.....	909	955	1,147	1,216	1,034	-4.8	-3.2
Virginia.....	40	163	27	12	1	-75.7	129.1
West Virginia.....	2,978	2,730	2,213	1,971	2,116	9.1	8.9
Ohio.....	26,503	29,024	28,609	24,318	28,688	-8.7	-2.0
New England.....	-	-	-	-	*	-	-
Connecticut.....	-	-	-	-	*	-	-
Middle Atlantic.....	457	770	1,168	1,568	2,443	-40.6	-34.2
New York.....	12	18	125	25	124	-32.9	-44.1
Pennsylvania.....	445	752	1,043	1,543	2,318	-40.8	-33.8
East North Central.....	23,486	25,162	25,201	20,912	24,810	-6.7	-1.4
Illinois.....	-	-	5	-	17	-	-
Indiana.....	93	337	464	243	345	-72.5	-28.0
Michigan.....	302	303	246	431	522	-3	-12.8
Ohio.....	23,091	24,521	24,478	20,228	23,907	-5.8	-9
Wisconsin.....	*	-	9	10	18	-	-60.6
West North Central.....	14	7	-	10	33	90.0	-19.6
Iowa.....	-	-	-	-	15	-	-
Minnesota.....	14	7	-	-	-	90.0	-
Missouri.....	-	-	-	10	18	-	-
South Atlantic.....	1,670	2,323	2,036	1,620	971	-28.1	14.5
Delaware.....	-	-	-	-	29	-	-
West Virginia.....	1,670	2,323	2,036	1,620	942	-28.1	15.4
East South Central.....	851	636	137	53	130	33.9	60.0
Alabama.....	4	69	103	18	37	-94.8	-44.1
Kentucky.....	848	567	30	14	93	49.5	73.6
Tennessee.....	-	-	4	21	-	-	-
Pennsylvania,							
Anthracite.....	4,445	4,575	4,330	3,497	4,346	-2.9	.6
New England.....	29	35	31	37	54	-16.8	-14.0
Connecticut.....	7	7	5	8	11	1.6	-10.7
Maine.....	3	4	4	3	6	-20.3	-17.4
Massachusetts.....	10	14	14	16	20	-30.4	-16.2
New Hampshire.....	5	5	4	5	8	7.1	-9.9
Rhode Island.....	2	3	3	3	3	-24.9	-10.1
Vermont.....	2	2	2	3	5	-22.3	-20.4
Middle Atlantic.....	4,086	4,236	3,985	2,922	3,227	-3.5	6.1
New Jersey.....	14	15	14	15	17	-2.8	-3.7
New York.....	92	130	151	140	121	-29.3	-6.6
Pennsylvania.....	3,980	4,091	3,821	2,768	3,089	-2.7	6.5
East North Central.....	44	41	41	37	36	8.0	4.7
Illinois.....	11	15	7	9	8	-27.8	8.0
Indiana.....	15	7	6	6	4	114.5	41.3
Michigan.....	1	1	3	9	2	19.4	-17.2
Ohio.....	11	13	19	8	21	-9.3	-13.8
Wisconsin.....	6	6	5	6	2	5.7	29.5
West North Central.....	55	52	64	46	31	6.0	15.0
Iowa.....	35	43	54	39	26	-18.1	8.2
Kansas.....	1	1	*	-	-	-12.0	-
Minnesota.....	7	4	7	7	3	105.9	21.1
Missouri.....	*	*	*	*	2	-12.3	-31.8
Nebraska.....	11	4	1	*	*	195.7	NM

See footnotes at end of table.

Table 59. Domestic Distribution of U.S. Coal by Coal-Producing Region and State, and Destination Census Division and State, 1994-1998 (Continued)
(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1998	1997	1996	1995	1994	Percent Change 1997-1998	Average Annual Percent Change
							1994-1998
Pennsylvania,							
Anthracite (Continued)							
North Dakota.....	*	*	2	*	*	38.9	7.1
South Dakota.....	-	-	-	-	*	-	-
South Atlantic.....	116	97	56	91	79	19.8	10.0
Delaware.....	7	8	10	11	11	-13.5	-9.6
District of Columbia.....	*	*	*	*	*	-16.5	9.8
Florida.....	4	7	6	9	8	-32.8	-13.9
Georgia.....	2	*	*	*	*	NM	66.4
Maryland.....	2	3	1	27	6	-25.0	-21.6
North Carolina.....	1	*	*	*	*	NM	39.6
South Carolina.....	54	31	*	3	8	71.4	60.7
Virginia.....	3	6	6	9	11	-51.2	-26.9
West Virginia.....	42	41	32	31	35	3.6	4.8
East South Central.....	50	31	50	44	28	59.5	16.1
Alabama.....	11	4	2	1	1	147.2	76.6
Kentucky.....	23	18	22	21	12	24.8	17.5
Mississippi.....	*	*	*	*	*	-39.8	7.3
Tennessee.....	16	9	26	22	15	87.6	3.2
West South Central.....	9	11	8	12	8	-17.8	5.8
Arkansas.....	2	*	*	*	1	NM	23.0
Louisiana.....	*	8	6	10	3	-100.0	-86.9
Oklahoma.....	*	*	*	*	*	-19.5	-6.8
Texas.....	7	3	1	2	3	138.2	25.2
Mountain.....	21	26	21	13	18	-20.4	4.2
Arizona.....	3	3	1	*	*	12.3	134.5
Colorado.....	18	20	16	12	15	-8.0	5.2
Idaho.....	-	-	*	*	3	-	-
Montana.....	-	-	2	-	*	-	-
Nevada.....	-	-	*	-	-	-	-
New Mexico.....	-	-	*	*	*	-	-15.9
Utah.....	*	3	*	*	*	-99.2	18.9
Wyoming.....	*	2	1	-	*	-99.6	-6.1
Pacific.....	15	14	12	12	7	7.5	20.6
Alaska.....	-	-	-	-	*	-	-
California.....	*	1	*	*	*	-36.2	-1.8
Oregon.....	15	13	12	12	7	9.7	21.9
Washington.....	-	*	-	*	-	-100.0	-
Pennsylvania,							
Bituminous							
New England.....	68,172	60,452	55,552	50,464	50,861	12.8	7.6
Connecticut.....	1,034	1,214	1,021	1,009	1,025	-14.8	.2
Maine.....	176	1	227	516	12	NM	97.7
Massachusetts.....	7	7	-	32	24	3.2	-27.1
New Hampshire.....	74	497	202	4	292	-85.1	-29.1
Vermont.....	778	710	592	458	698	9.6	2.8
Middle Atlantic.....	-	*	*	-	-	-100.0	-
New Jersey.....	43,477	41,194	40,063	37,612	38,188	5.5	3.3
New York.....	534	567	538	558	537	-5.7	-1
Pennsylvania.....	5,006	3,884	4,125	3,675	5,551	28.9	-2.5
East North Central.....	37,937	36,743	35,400	33,379	32,100	3.3	4.3
Illinois.....	12,534	10,238	8,460	6,682	6,288	22.4	18.8
Indiana.....	50	-	-	-	206	-	-29.8
Michigan.....	296	548	559	222	629	-46.0	-17.2
Ohio.....	4,025	2,876	2,075	2,650	1,756	40.0	23.0
Wisconsin.....	6,021	4,756	4,463	2,707	2,769	26.6	21.4
West North Central.....	2,141	2,058	1,362	1,103	928	4.0	23.2
Iowa.....	240	178	248	228	46	34.8	51.3
Minnesota.....	240	178	225	227	46	34.8	51.3
Missouri.....	-	-	23	-	-	-	-
South Atlantic.....	-	-	-	1	-	-	-
Delaware.....	9,508	5,783	3,968	3,377	3,783	64.4	25.9
District of Columbia.....	1,210	655	528	452	314	84.8	40.1
Florida.....	2	-	-	-	-	-	-
Maryland.....	213	-	-	-	135	-	12.1
South Carolina.....	3,029	1,921	1,602	1,741	2,278	57.7	7.4
Virginia.....	-	-	-	6	-	-	-
	402	226	5	20	55	78.0	64.6

See footnotes at end of table.

Table 59. Domestic Distribution of U.S. Coal by Coal-Producing Region and State, and Destination Census Division and State, 1994-1998 (Continued)
(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1998	1997	1996	1995	1994	Percent Change 1997-1998	Average Annual Percent Change
							1994-1998
Pennsylvania,							
Bituminous (Continued)							
West Virginia.....	4,651	2,982	1,833	1,157	1,002	56.0	46.8
East South Central.....	931	1,302	1,144	1,078	993	-28.5	-1.6
Alabama.....	51	95	6	39	34	-45.7	10.9
Kentucky.....	196	344	500	363	460	-43.1	-19.2
Tennessee.....	684	864	639	675	500	-20.8	8.2
West South Central.....	42	11	195	6	-	268.7	-
Louisiana.....	42	11	195	-	-	293.3	-
Texas.....	*	1	*	6	-	-96.8	-
Mountain.....	153	199	230	215	183	-22.8	-4.4
Utah.....	153	199	230	215	183	-22.8	-4.4
Tennessee.....	2,741	R 3,080	3,052	2,627	2,547	-11.0	1.8
East North Central.....	-	*	*	*	1	-100.0	-
Illinois.....	-	-	-	-	1	-	-
Michigan.....	-	-	-	*	-	-	-
Ohio.....	-	*	*	*	-	-100.0	-
South Atlantic.....	1,305	R 485	141	251	301	169.1	44.3
Florida.....	209	-	-	39	40	-	50.8
Georgia.....	693	R 403	141	189	202	72.1	36.1
North Carolina.....	22	45	1	23	58	-51.1	-21.7
South Carolina.....	381	37	-	-	-	NM	-
East South Central.....	1,435	2,593	2,902	2,363	2,223	-44.7	-10.4
Alabama.....	5	743	331	936	710	-99.3	-70.8
Kentucky.....	7	-	23	5	135	-	-52.3
Tennessee.....	1,422	1,850	2,548	1,422	1,378	-23.1	.8
Virginia.....	20,728	R 22,736	22,776	24,283	26,866	-8.8	-6.3
New England.....	1	15	18	19	-	-93.4	-
Connecticut.....	-	5	-	-	-	-100.0	-
Massachusetts.....	1	-	8	-	-	-	-
New Hampshire.....	-	10	10	19	-	-100.0	-
Middle Atlantic.....	908	3,469	2,045	2,311	1,490	-73.8	-11.6
New Jersey.....	700	805	601	635	190	-13.0	38.5
New York.....	4	13	146	362	156	-71.8	-60.9
Pennsylvania.....	204	2,651	1,299	1,314	1,143	-92.3	-35.0
East North Central.....	2,563	3,484	3,237	3,557	2,455	-26.4	1.1
Illinois.....	176	677	583	578	302	-74.0	-12.6
Indiana.....	1,526	1,587	2,290	2,395	1,202	-3.8	6.1
Michigan.....	*	*	25	83	376	195.8	-88.3
Ohio.....	861	1,220	331	493	488	-29.5	15.2
Wisconsin.....	-	-	9	9	86	-	-
West North Central.....	-	-	-	8	-	-	-
Missouri.....	-	-	-	8	-	-	-
South Atlantic.....	13,999	R 12,147	13,507	14,600	18,898	15.2	-7.2
Delaware.....	146	179	166	152	203	-18.7	-8.0
Florida.....	866	451	549	377	531	92.2	13.0
Georgia.....	2,893	1,860	1,785	2,064	3,038	55.5	-1.2
Maryland.....	*	*	1	392	90	-8	-80.8
North Carolina.....	735	840	1,883	4,056	5,634	-12.5	-39.9
South Carolina.....	1,342	1,492	1,605	1,468	1,604	-10.1	-4.4
Virginia.....	7,602	R 6,854	7,231	5,657	6,867	10.9	2.6
West Virginia.....	415	471	287	433	930	-11.9	-18.3
East South Central.....	3,138	3,286	3,581	3,413	3,658	-4.5	-3.8
Alabama.....	857	1,057	1,036	1,083	1,156	-18.9	-7.2
Kentucky.....	3	18	3	142	41	-84.7	-49.1
Mississippi.....	18	8	13	-	-	109.7	-
Tennessee.....	2,260	2,203	2,529	2,187	2,462	2.6	-2.1
West South Central.....	41	14	13	21	-	182.7	-
Louisiana.....	-	-	-	21	-	-	-
Oklahoma.....	19	-	-	-	-	-	-
Texas.....	21	14	13	-	-	48.5	-
Mountain.....	27	298	332	313	320	-91.1	-46.3
Utah.....	27	298	332	313	320	-91.1	-46.3
Pacific.....	-	*	-	-	-	-100.0	-
California.....	-	*	-	-	-	-100.0	-

See footnotes at end of table.

Table 59. Domestic Distribution of U.S. Coal by Coal-Producing Region and State, and Destination Census Division and State, 1994-1998 (Continued)
(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1998	1997	1996	1995	1994	Percent Change 1997-1998	Average Annual Percent Change
							1994-1998
West Virginia, Northern	40,410	41,494	40,398	36,073	39,985	-2.6	0.3
New England	914	1,161	1,070	918	1,086	-21.2	-4.2
Connecticut	667	687	683	572	166	-3.0	41.7
Maine.....	-	1	13	9	-	-100.0	-
Massachusetts.....	40	132	53	113	648	-69.9	-50.2
New Hampshire	208	340	322	225	272	-38.8	-6.5
Middle Atlantic.....	14,400	14,973	14,276	13,740	12,566	-3.8	3.5
New Jersey.....	1,463	1,365	1,530	1,182	1,096	7.2	7.5
New York.....	4,018	4,708	4,140	4,040	3,079	-14.6	6.9
Pennsylvania	8,918	8,900	8,606	8,518	8,391	.2	1.5
East North Central.....	6,267	5,513	5,410	2,887	5,924	13.7	1.4
Illinois	88	-	9	51	23	-	39.2
Indiana.....	485	157	479	38	1,060	208.4	-17.7
Michigan	704	679	640	437	392	3.6	15.7
Ohio.....	4,630	4,155	3,966	1,977	4,098	11.4	3.1
Wisconsin.....	360	522	317	384	350	-31.0	.7
West North Central.....	34	-	*	3	12	-	30.7
Iowa.....	-	-	-	-	2	-	-
Minnesota.....	-	-	-	3	10	-	-
Missouri.....	34	-	-	-	-	-	-
North Dakota.....	-	-	*	-	-	-	-
South Atlantic.....	16,983	17,631	17,820	17,213	19,270	-3.7	-3.1
Delaware	513	442	449	737	969	16.1	-14.7
District of Columbia.....	-	3	6	5	10	-100.0	-
Florida.....	664	610	551	259	449	8.9	10.3
Maryland.....	4,146	4,862	4,773	3,341	3,443	-14.7	4.8
North Carolina.....	-	-	13	-	7	-	-
South Carolina.....	-	-	3	-	1	-	-
Virginia	738	635	66	30	75	16.3	77.4
West Virginia.....	10,921	11,080	11,959	12,841	14,316	-1.4	-6.5
East South Central.....	1,602	1,866	1,522	1,178	492	-14.1	34.3
Alabama.....	396	442	419	604	34	-10.4	84.9
Kentucky.....	1,206	1,424	1,026	527	160	-15.3	65.6
Mississippi.....	-	-	-	-	5	-	-
Tennessee.....	-	-	78	46	293	-	-
West South Central.....	102	282	203	-	368	-63.9	-27.5
Louisiana.....	101	282	203	-	368	-64.1	-27.6
Texas.....	1	-	-	-	-	-	-
Mountain.....	-	-	-	*	-	-	-
Nevada.....	-	-	-	*	-	-	-
West Virginia,							
Southern	94,671	R 92,284	86,757	84,793	82,794	2.6	3.4
New England	2,515	1,909	1,853	1,404	1,351	31.7	16.8
Connecticut	76	135	24	-	-	-43.7	-
Maine.....	-	*	13	-	*	-100.0	-
Massachusetts.....	2,430	1,774	1,792	1,330	1,351	37.0	15.8
New Hampshire	8	-	24	74	-	-	-
Rhode Island.....	-	*	-	-	-	-100.0	-
Vermont.....	*	-	-	-	*	-	-14.3
Middle Atlantic.....	9,006	8,702	7,391	7,170	6,738	3.5	7.5
New Jersey.....	214	492	216	165	260	-56.5	-4.8
New York.....	1,477	1,560	1,545	1,466	1,345	-5.3	2.4
Pennsylvania	7,315	6,651	5,630	5,538	5,133	10.0	9.3
East North Central.....	30,360	29,392	30,404	28,905	27,503	3.3	2.5
Illinois	1,753	1,807	1,841	1,400	1,403	-3.0	5.7
Indiana.....	5,882	5,773	4,809	5,142	4,918	1.9	4.6
Michigan	5,150	5,415	4,869	4,416	5,903	-4.9	-3.3
Ohio.....	17,514	16,057	18,770	17,566	14,802	9.1	4.3
Wisconsin.....	60	340	115	381	478	-82.2	-40.4
West North Central.....	304	245	113	313	237	24.3	6.4
Iowa.....	160	119	44	119	70	35.0	23.2
Minnesota.....	116	87	32	107	92	32.8	6.0
Missouri.....	23	39	36	85	70	-40.1	-24.1
Nebraska.....	5	-	-	-	-	-	-
North Dakota.....	-	-	-	*	-	-	-
South Dakota.....	-	-	1	2	6	-	-
South Atlantic.....	42,145	R 42,166	37,986	36,164	36,045	*	4.0

See footnotes at end of table.

Table 59. Domestic Distribution of U.S. Coal by Coal-Producing Region and State, and Destination Census Division and State, 1994-1998 (Continued)
(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1998	1997	1996	1995	1994	Percent Change 1997-1998	Average Annual Percent Change
							1994-1998
West Virginia,							
Southern (Continued)							
Delaware	376	450	551	485	621	-16.5	-11.8
District of Columbia	6	37	17	-	24	-83.6	-29.2
Florida	1,570	1,896	1,123	1,341	1,372	-17.2	3.4
Georgia	4,782	4,969	4,064	4,159	4,106	-3.8	3.9
Maryland	2,735	2,607	3,132	3,209	2,855	4.9	-1.1
North Carolina	9,780	9,740	8,274	7,169	6,910	.4	9.1
South Carolina	815	100	347	257	394	NM	19.9
Virginia	4,552	4,306	3,217	3,367	3,188	5.7	9.3
West Virginia	17,529	^R 18,061	17,261	16,177	16,575	-2.9	1.4
East South Central	9,676	9,269	8,677	10,433	10,551	4.4	-2.1
Alabama	2,268	3,078	2,922	3,487	4,392	-26.3	-15.2
Kentucky	6,991	5,540	4,250	5,330	4,744	26.2	10.2
Mississippi	38	20	24	44	93	94.9	-19.8
Tennessee	378	631	1,482	1,571	1,322	-40.0	-26.9
West South Central	148	66	81	48	60	124.3	25.2
Louisiana	27	18	-	-	4	50.9	61.1
Oklahoma	121	47	77	48	56	159.3	21.5
Texas	-	2	4	-	1	-100.0	-
Mountain	181	229	18	206	212	-20.7	-3.8
Idaho	20	-	-	-	*	-	162.8
Nevada	36	-	-	-	-	-	-
Utah	125	229	18	206	211	-45.3	-12.3
Pacific	-	10	28	2	1	-100.0	-
Oregon	-	10	2	2	1	-100.0	-
Washington	-	-	26	-	-	-	-
Interior Total	167,285	167,821	165,668	162,947	175,622	-.3	-1.2
Arkansas	23	9	7	11	28	148.9	-5.0
West North Central	19	1	-	-	4	NM	50.6
Missouri	19	1	-	-	4	NM	50.6
South Atlantic	1	-	-	-	-	-	-
Maryland	1	-	-	-	-	-	-
West South Central	3	8	7	11	24	-60.5	-39.7
Arkansas	-	4	7	11	13	-100.0	-
Oklahoma	-	-	-	-	*	-	-
Texas	3	4	-	-	12	-20.9	-27.5
Illinois	39,447	40,447	45,190	45,170	51,737	-2.5	-6.6
New England	-	-	-	*	-	-	-
Connecticut	-	-	-	*	-	-	-
Middle Atlantic	-	*	*	*	*	-100.0	-
New Jersey	-	-	*	*	-	-	-
New York	-	-	*	*	*	-	-
Pennsylvania	-	*	*	*	*	-100.0	-
East North Central	21,808	23,224	25,316	25,629	28,299	-6.1	-6.3
Illinois	16,652	18,085	16,052	15,587	17,517	-7.9	-1.3
Indiana	4,184	4,272	8,178	8,559	9,574	-2.0	-18.7
Michigan	-	-	59	70	51	-	-
Ohio	2	-	18	1	18	-	-45.1
Wisconsin	969	868	1,008	1,412	1,139	11.7	-3.9
West North Central	3,767	3,934	5,347	6,270	9,448	-4.2	-20.5
Iowa	949	731	694	1,216	1,535	29.8	-11.3
Kansas	41	129	149	128	193	-68.7	-32.3
Minnesota	104	176	100	111	179	-40.9	-12.8
Missouri	2,674	2,897	4,403	4,815	7,541	-7.7	-22.8
North Dakota	*	*	-	-	-	NM	-
South Atlantic	6,941	6,612	7,255	6,651	8,403	5.0	-4.7
Florida	6,265	5,585	6,052	6,056	5,846	12.2	1.8
Georgia	676	1,027	1,204	584	2,557	-34.2	-28.3
Maryland	-	-	-	5	-	-	-
North Carolina	-	*	-	*	-	-100.0	-
Virginia	-	-	*	*	-	-	-
West Virginia	*	-	-	6	*	-	7.1
East South Central	5,795	5,600	7,130	6,510	5,453	3.5	1.5
Alabama	809	1,348	2,155	1,146	750	-40.0	1.9
Kentucky	686	152	1	274	343	350.4	18.9

See footnotes at end of table.

Table 59. Domestic Distribution of U.S. Coal by Coal-Producing Region and State, and Destination Census Division and State, 1994-1998 (Continued)
(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1998	1997	1996	1995	1994	Percent Change 1997-1998	Average Annual Percent Change
							1994-1998
Illinois (Continued)							
Mississippi.....	1,538	1,228	1,749	1,304	1,164	25.3	7.2
Tennessee.....	2,762	2,872	3,225	3,787	3,195	-3.8	-3.6
West South Central.....	1,125	1,055	86	86	46	6.6	122.7
Arkansas.....	12	67	76	76	30	-82.4	-20.9
Louisiana.....	1,113	987	-	-	-	12.8	-
Oklahoma.....	-	1	10	10	16	-100.0	-
Mountain.....	-	-	40	-	-	-	-
Colorado.....	-	-	40	-	-	-	-
Indiana	36,774	34,805	29,664	25,625	30,477	5.7	4.8
New England.....	-	-	*	-	*	-	-
Connecticut.....	-	-	*	-	*	-	-
East North Central.....	35,079	32,267	26,318	22,461	27,088	8.7	6.7
Illinois.....	1,807	1,920	1,444	963	1,597	-5.9	3.1
Indiana.....	32,872	29,916	24,309	21,185	24,733	9.9	7.4
Michigan.....	148	162	181	180	135	-8.5	2.3
Ohio.....	7	4	34	26	36	92.2	-32.6
Wisconsin.....	245	265	350	106	587	-7.5	-19.6
West North Central.....	478	359	655	454	973	33.1	-16.3
Iowa.....	259	347	638	435	426	-25.3	-11.7
Minnesota.....	67	4	-	-	43	NM	11.7
Missouri.....	152	8	17	19	504	NM	-25.9
South Atlantic.....	41	-	-	-	19	-	20.4
Florida.....	41	-	-	-	-	-	-
Georgia.....	-	-	-	-	19	-	-
East South Central.....	1,139	2,148	2,677	2,586	2,313	-47.0	-16.2
Alabama.....	-	-	26	1	56	-	-
Kentucky.....	1,093	2,148	2,610	2,466	2,219	-49.1	-16.2
Tennessee.....	47	-	41	119	38	-	5.2
West South Central.....	1	2	6	1	4	-63.9	-35.9
Oklahoma.....	1	*	4	-	3	NM	-33.6
Texas.....	-	2	2	1	*	-100.0	-
Iowa	-	-	-	-	46	-	-
West North Central.....	-	-	-	-	46	-	-
Iowa.....	-	-	-	-	46	-	-
Kansas	440	434	245	291	282	1.5	11.8
West North Central.....	440	434	233	291	282	1.5	11.8
Kansas.....	366	354	164	160	165	3.5	22.0
Missouri.....	74	80	69	131	117	-7.4	-10.7
West South Central.....	-	-	12	-	-	-	-
Oklahoma.....	-	-	12	-	-	-	-
Kentucky, Western	32,329	33,030	34,821	32,990	34,729	-2.1	-1.8
New England.....	55	-	-	-	-	-	-
Maine.....	55	-	-	-	-	-	-
Middle Atlantic.....	26	-	-	-	*	-	383.8
New Jersey.....	26	-	-	-	-	-	-
Pennsylvania.....	-	-	-	-	*	-	-
East North Central.....	772	575	1,016	542	2,762	34.3	-27.3
Illinois.....	324	103	119	-	192	215.3	14.0
Indiana.....	270	257	680	243	2,214	5.2	-40.9
Michigan.....	14	-	-	-	12	-	2.6
Ohio.....	-	30	31	103	180	-100.0	-
Wisconsin.....	164	185	187	196	165	-11.6	-1.1
West North Central.....	719	350	237	101	1,170	105.5	-11.4
Iowa.....	504	320	211	75	377	57.6	7.5
Minnesota.....	4	-	22	19	26	-	-36.2
Missouri.....	211	30	5	6	766	NM	-27.6
South Atlantic.....	3,319	3,806	3,254	2,375	2,709	-12.8	5.2
Florida.....	2,255	3,804	3,254	2,375	2,706	-40.7	-4.4
Maryland.....	-	2	-	-	-	-100.0	-
North Carolina.....	-	-	-	-	*	-	-
South Carolina.....	-	-	-	-	*	-	-
Virginia.....	1,064	*	*	-	-	NM	-
West Virginia.....	-	-	-	-	3	-	-

See footnotes at end of table.

Table 59. Domestic Distribution of U.S. Coal by Coal-Producing Region and State, and Destination Census Division and State, 1994-1998 (Continued)
(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1998	1997	1996	1995	1994	Percent Change 1997-1998	Average Annual Percent Change
							1994-1998
Kentucky, Western (Continued)							
East South Central	26,770	28,155	29,605	29,927	28,048	-4.9	-1.2
Alabama	1,816	1,798	3,142	1,717	2,038	1.0	-2.8
Kentucky	18,950	14,169	16,375	17,488	16,401	33.8	3.7
Mississippi	3	-	107	-	-	-	-
Tennessee	6,000	12,188	9,981	10,723	9,609	-50.8	-11.1
West South Central	661	112	657	13	8	489.6	199.2
Arkansas	-	4	11	13	8	-100.0	-
Louisiana	661	108	646	-	-	NM	-
Louisiana	3,331	3,545	3,222	3,426	3,463	-6.0	-1.0
West South Central	3,331	3,545	3,222	3,426	3,463	-6.0	-1.0
Louisiana	3,331	3,545	3,222	3,426	3,463	-6.0	-1.0
Missouri	296	401	846	464	679	-26.0	-18.7
West North Central	281	389	846	464	679	-27.7	-19.8
Kansas	1	40	345	91	77	-98.2	-69.0
Missouri	281	349	501	373	602	-19.7	-17.4
West South Central	15	9	-	-	-	72.6	-
Arkansas	15	9	-	-	-	72.6	-
Oklahoma	1,731	1,688	2,136	2,158	1,925	2.6	-2.6
West North Central	153	110	63	31	27	38.2	54.8
Kansas	153	110	63	31	22	38.2	62.6
Missouri	-	-	-	*	5	-	-
East South Central	-	-	-	2	-	-	-
Kentucky	-	-	-	2	-	-	-
West South Central	1,570	1,568	2,066	2,121	1,896	.2	-4.6
Arkansas	71	160	170	159	205	-55.6	-23.3
Oklahoma	1,411	1,260	1,712	1,790	1,532	12.0	-2.0
Texas	88	148	184	171	159	-40.1	-13.7
Pacific	-	-	-	-	*	-	-
California	-	-	-	-	*	-	-
Texas	52,913	53,463	49,538	52,812	52,256	-1.0	.3
West South Central	52,913	53,463	49,538	52,812	52,256	-1.0	.3
Louisiana	144	-	-	-	-	-	-
Texas	52,769	53,463	49,538	52,812	52,256	-1.3	.2
Western Total	481,137	439,713	428,297	420,132	398,402	9.4	4.8
Alaska	970	743	697	815	789	30.4	5.3
Pacific	970	743	697	815	789	30.4	5.3
Alaska	970	743	697	815	789	30.4	5.3
Arizona	12,169	11,044	10,970	11,783	12,011	10.2	.3
Mountain	12,169	11,044	10,970	11,783	12,011	10.2	.3
Arizona	7,680	6,646	6,499	6,956	7,580	15.6	.3
Nevada	4,489	4,398	4,470	4,827	4,431	2.1	.3
Colorado	27,541	25,445	23,990	24,734	24,059	8.2	3.4
New England	-	107	-	-	-	-100.0	-
Vermont	-	107	-	-	-	-100.0	-
East North Central	2,680	1,873	1,366	2,333	2,357	43.1	3.3
Illinois	2,433	1,196	640	1,628	1,439	103.5	14.0
Indiana	51	-	-	20	457	-	-42.1
Michigan	176	10	-	44	-	NM	-
Wisconsin	20	667	726	641	462	-97.0	-54.3
West North Central	1,994	2,879	3,218	3,109	2,194	-30.7	-2.4
Iowa	595	644	591	550	171	-7.5	36.6
Kansas	1,289	1,264	1,493	1,436	1,148	2.0	2.9
Minnesota	-	-	-	13	23	-	-
Missouri	14	907	1,077	1,005	775	-98.5	-63.5
Nebraska	97	65	56	104	77	48.8	5.9
South Atlantic	-	-	136	811	435	-	-
Florida	-	-	136	811	423	-	-
Georgia	-	-	-	-	11	-	-
West Virginia	-	-	-	-	2	-	-
East South Central	4,453	3,349	3,817	2,797	2,038	33.0	21.6

See footnotes at end of table.

Table 59. Domestic Distribution of U.S. Coal by Coal-Producing Region and State, and Destination Census Division and State, 1994-1998 (Continued)
(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1998	1997	1996	1995	1994	Percent Change 1997-1998	Average Annual Percent Change
							1994-1998
Colorado (Continued)							
Alabama	427	-	-	-	-	-	-
Kentucky	1,962	190	260	1,098	710	NM	28.9
Mississippi.....	-	35	519	963	735	-100.0	-
Tennessee.....	2,064	3,125	3,038	736	593	-33.9	36.6
West South Central.....	3,314	2,296	2,443	2,258	2,563	44.3	6.6
Arkansas.....	5	29	-	-	-	-82.1	-
Oklahoma.....	-	-	-	31	26	-	-
Texas.....	3,309	2,267	2,443	2,228	2,537	45.9	6.9
Mountain.....	15,004	14,792	12,861	13,353	14,362	1.4	1.1
Arizona.....	467	74	355	105	219	NM	20.9
Colorado.....	11,993	12,307	10,704	11,820	12,035	-2.5	-1
Idaho.....	-	-	-	3	-	-	-
Montana.....	6	-	-	-	-	-	-
Nevada.....	20	69	132	161	306	-71.0	-49.5
New Mexico.....	131	99	88	97	84	31.6	11.5
Utah.....	2,238	2,111	1,204	1,113	1,714	6.0	6.9
Wyoming.....	149	131	378	53	4	13.9	145.6
Pacific.....	85	138	131	37	73	-38.5	3.7
California.....	78	47	-	1	22	66.1	37.7
Oregon.....	-	67	94	-	-	-100.0	-
Washington.....	7	24	37	36	52	-71.2	-39.2
Montana.....	41,860	40,363	37,770	39,362	41,672	3.7	.1
East North Central.....	13,719	16,361	15,814	16,582	17,875	-16.1	-6.4
Illinois.....	1,679	1,545	2,162	2,713	4,338	8.7	-21.1
Indiana.....	126	1,259	869	720	749	-90.0	-36.0
Michigan.....	9,861	10,866	9,806	11,014	10,481	-9.3	-1.5
Ohio.....	-	42	26	-	-	-100.0	-
Wisconsin.....	2,053	2,649	2,950	2,135	2,307	-22.5	-2.9
West North Central.....	13,289	11,372	11,622	11,338	10,668	16.8	5.6
Iowa.....	136	105	-	2	*	29.6	493.0
Kansas.....	379	104	-	-	-	265.1	-
Minnesota.....	10,477	8,847	9,791	10,199	10,038	18.4	1.1
Missouri.....	-	-	-	6	-	-	-
Nebraska.....	81	47	113	205	71	71.0	3.5
North Dakota.....	517	402	417	469	559	28.8	-1.9
South Dakota.....	1,698	1,867	1,301	457	-	-9.0	-
East South Central.....	2,833	3,235	2,226	1,234	1,314	-12.4	21.2
Mississippi.....	2,833	3,235	2,226	1,234	1,314	-12.4	21.2
Mountain.....	10,516	9,052	7,995	9,611	10,718	16.2	-5
Arizona.....	94	-	-	-	-	-	-
Colorado.....	-	-	26	63	89	-	-
Montana.....	10,360	9,019	7,844	9,477	10,581	14.9	-5
Wyoming.....	62	34	125	71	49	85.1	6.0
Pacific.....	1,503	333	113	583	1,097	351.1	8.2
Washington.....	1,503	333	113	583	1,097	351.1	8.2
New Mexico.....	28,026	27,352	25,035	25,640	28,540	2.5	-4
East North Central.....	466	523	732	1,591	1,495	-10.9	-25.3
Wisconsin.....	466	523	732	1,591	1,495	-10.9	-25.3
West North Central.....	-	68	92	-	-	-100.0	-
Nebraska.....	-	68	92	-	-	-100.0	-
West South Central.....	591	482	334	160	296	22.6	18.8
Arkansas.....	-	-	1	-	-	-	-
Oklahoma.....	119	108	17	-	-	10.8	-
Texas.....	472	375	316	160	296	26.0	12.3
Mountain.....	26,968	26,279	23,877	23,889	26,749	2.6	.2
Arizona.....	11,138	10,492	8,860	9,259	11,284	6.2	-3
Colorado.....	11	-	9	-	-	-	-
New Mexico.....	15,819	15,786	15,009	14,630	15,464	.2	.6
North Dakota.....	30,557	29,172	30,025	30,118	32,056	4.8	-1.2
East North Central.....	-	-	-	-	*	-	-
Wisconsin.....	-	-	-	-	*	-	-
West North Central.....	30,557	29,172	30,025	30,113	32,055	4.8	-1.2
North Dakota.....	30,557	29,172	30,025	28,838	29,731	4.8	.7
South Dakota.....	-	-	-	1,276	2,325	-	-

See footnotes at end of table.

Table 59. Domestic Distribution of U.S. Coal by Coal-Producing Region and State, and Destination Census Division and State, 1994-1998 (Continued)
(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1998	1997	1996	1995	1994	Percent Change 1997-1998	Average Annual Percent Change
							1994-1998
Utah	24,229	22,857	18,563	21,591	20,527	6.0	4.2
New England	-	90	-	17	-	-100.0	-
Connecticut	-	-	-	17	-	-	-
Massachusetts	-	90	-	-	-	-100.0	-
Middle Atlantic	*	-	-	20	68	-	-74.3
Pennsylvania	*	-	-	20	68	-	-74.3
East North Central	2,266	1,518	2,650	1,932	656	49.3	36.3
Illinois	2,266	1,446	2,473	1,776	369	56.7	57.4
Indiana	-	-	-	-	178	-	-
Michigan	-	-	44	76	66	-	-
Wisconsin	-	72	133	81	43	-100.0	-
West North Central	10	140	330	395	414	-92.9	-60.6
Kansas	*	-	-	*	2	-	-67.2
Minnesota	-	-	-	1	-	-	-
Missouri	10	140	330	393	412	-92.9	-60.5
East South Central	996	1,521	1,421	1,095	218	-34.5	46.2
Tennessee	996	1,521	1,421	1,095	218	-34.5	46.2
West South Central	-	-	-	4	33	-	-
Texas	-	-	-	4	33	-	-
Mountain	16,090	16,710	11,791	15,163	15,793	-3.7	.5
Arizona	-	78	69	80	86	-100.0	-
Colorado	3	3	2	6	4	4.3	-3.1
Idaho	121	39	65	141	59	210.7	19.5
Montana	3	27	-	9	29	-88.6	-42.9
Nevada	3,431	2,626	2,265	2,150	2,027	30.7	14.1
Utah	12,531	13,936	9,389	12,755	13,586	-10.1	-2.0
Wyoming	-	-	*	22	2	-	-
Pacific	4,837	2,865	2,366	2,965	3,317	68.8	9.9
California	4,711	2,718	2,240	2,838	3,074	73.4	11.3
Hawaii	34	21	-	-	-	56.8	-
Oregon	1	7	*	2	127	-91.1	-73.7
Washington	92	119	125	126	115	-23.0	-5.5
Washington	4,622	4,481	4,526	4,756	4,731	3.2	-6
Pacific	4,622	4,481	4,526	4,756	4,731	3.2	-6
Oregon	-	*	3	2	-	-100.0	-
Washington	4,622	4,480	4,523	4,754	4,731	3.2	-6
Wyoming	311,162	278,255	276,723	261,333	234,016	11.8	7.4
New England	33	-	-	-	*	-	NM
Connecticut	33	-	-	-	*	-	NM
East North Central	72,475	65,944	62,041	55,223	42,685	9.9	14.1
Illinois	20,866	20,528	17,734	15,480	9,779	1.6	20.9
Indiana	17,282	16,451	18,079	18,306	15,417	5.0	2.9
Michigan	11,936	9,558	8,551	7,543	4,267	24.9	29.3
Ohio	2,435	1,481	37	-	-	64.4	-
Wisconsin	19,956	17,925	17,640	13,895	13,221	11.3	10.8
West North Central	94,146	81,627	82,593	77,051	67,523	15.3	8.7
Iowa	20,690	17,593	18,121	16,955	15,505	17.6	7.5
Kansas	14,373	11,759	11,772	14,243	16,490	22.2	-3.4
Minnesota	8,568	9,224	8,569	8,816	9,911	-7.1	-3.6
Missouri	38,358	33,300	33,312	25,731	16,112	15.2	24.2
Nebraska	11,661	9,198	10,464	10,065	8,908	26.8	7.0
North Dakota	65	144	*	*	-	-54.9	-
South Dakota	430	410	355	1,241	597	4.8	-7.9
South Atlantic	7,069	6,705	7,409	7,432	5,836	5.4	4.9
Florida	1,064	971	591	-	93	9.7	83.8
Georgia	5,950	5,688	6,818	6,796	4,914	4.6	4.9
Maryland	-	-	-	636	829	-	-
North Carolina	-	40	-	-	-	-100.0	-
Virginia	55	-	-	-	-	-	-
West Virginia	-	7	-	-	-	-100.0	-
East South Central	10,235	7,826	4,010	2,970	594	30.8	103.8
Alabama	6,017	5,205	3,686	2,950	251	15.6	121.2
Mississippi	468	291	26	-	-	60.7	-
Tennessee	3,750	2,330	298	20	342	60.9	81.9
West South Central	88,046	80,727	86,413	82,918	80,246	9.1	2.3
Arkansas	13,353	11,600	14,614	14,033	12,184	15.1	2.3

See footnotes at end of table.

Table 59. Domestic Distribution of U.S. Coal by Coal-Producing Region and State, and Destination Census Division and State, 1994-1998 (Continued)
(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1998	1997	1996	1995	1994	Percent Change 1997-1998	Average Annual Percent Change
							1994-1998
Wyoming (Continued)							
Louisiana	10,346	9,628	9,209	10,309	11,215	7.5	-2.0
Oklahoma	19,258	18,462	19,751	20,326	17,577	4.3	2.3
Texas	45,089	41,037	42,839	38,250	39,270	9.9	3.5
Mountain	37,068	34,418	33,363	32,950	34,935	7.7	1.5
Arizona	368	57	-	-	-	NM	-
Colorado	8,132	6,692	6,124	5,602	5,132	21.5	12.2
Idaho	392	324	268	293	337	20.8	3.8
Montana	457	572	513	193	119	-20.1	40.1
Nevada	-	17	204	342	1,014	-100.0	-
Utah	*	*	1	*	-	85.4	-
Wyoming	27,719	26,756	26,253	26,521	28,334	3.6	-5
Pacific	2,063	996	894	2,775	2,198	107.2	-1.6
California	-	29	-	-	-	-100.0	-
Oregon	2,062	966	894	1,485	2,197	113.5	-1.6
Washington	1	1	1	1,290	1	-5.4	-14.1
U.S. Total	1,042,236	995,664	967,693	940,423	949,843	4.7	2.3
New England	5,478	6,414	5,334	5,199	4,963	-14.6	2.5
Connecticut	1,418	1,590	1,602	1,955	976	-10.8	9.8
Maine	258	423	301	302	463	-38.9	-13.6
Massachusetts	2,798	3,225	2,475	2,157	2,538	-13.3	2.5
New Hampshire	1,000	1,064	951	780	978	-6.1	.6
Rhode Island	2	3	3	3	3	-25.5	-10.1
Vermont	2	110	2	3	5	-98.2	-20.3
Middle Atlantic	74,961	76,487	73,489	70,149	69,737	-2.0	1.8
New Jersey	2,952	3,334	2,927	2,936	2,163	-11.5	8.1
New York	12,427	11,807	11,459	10,705	11,664	5.3	1.6
Pennsylvania	59,582	61,345	59,103	56,509	55,910	-2.9	1.6
East North Central	245,289	237,757	228,473	212,105	214,903	3.2	3.4
Illinois	48,838	49,647	44,547	41,626	38,745	-1.6	6.0
Indiana	65,893	62,630	62,741	59,476	63,589	5.2	.9
Michigan	39,731	36,629	33,186	33,928	33,487	8.5	4.4
Ohio	63,646	61,990	61,713	54,310	56,850	2.7	2.9
Wisconsin	27,180	26,860	26,285	22,766	22,231	1.2	5.1
West North Central	147,000	131,862	136,573	130,836	126,407	11.5	3.8
Iowa	23,803	20,339	21,017	19,777	18,259	17.0	6.8
Kansas	16,601	13,761	13,987	16,091	18,097	20.6	-2.1
Minnesota	19,447	18,485	18,679	19,488	20,498	5.2	-1.3
Missouri	42,019	37,897	40,064	32,821	27,278	10.9	11.4
Nebraska	11,855	9,382	10,726	10,377	9,055	26.4	7.0
North Dakota	31,139	29,717	30,444	29,307	30,290	4.8	.7
South Dakota	2,135	2,281	1,657	2,976	2,929	-6.4	-7.6
South Atlantic	174,010	166,712	161,026	151,954	161,029	4.4	2.0
Delaware	2,440	1,734	1,834	1,933	2,309	40.7	1.4
District of Columbia	8	40	23	6	47	-80.8	-36.4
Florida	27,078	27,692	26,285	23,505	23,757	-2.2	3.3
Georgia	31,576	29,910	29,074	29,730	30,497	5.6	.9
Maryland	11,171	10,489	10,762	10,596	10,959	6.5	.5
North Carolina	27,717	26,505	27,414	24,149	26,199	4.6	1.4
South Carolina	15,651	13,761	13,373	11,745	13,454	13.7	3.8
Virginia	19,792	18,638	16,214	15,225	16,735	6.2	4.3
West Virginia	38,576	37,945	36,047	35,065	37,071	1.7	1.0
East South Central	109,919	108,483	105,708	104,194	99,350	1.3	2.6
Alabama	31,530	32,056	33,057	31,440	30,210	-1.6	1.1
Kentucky	42,704	33,215	34,438	37,382	35,636	28.6	4.6
Mississippi	5,949	6,141	5,702	4,516	4,446	-3.1	7.5
Tennessee	29,736	37,071	32,510	30,856	29,057	-19.8	.6
West South Central	152,028	143,816	145,394	144,435	142,136	5.7	1.7
Arkansas	13,536	11,921	14,918	14,317	12,501	13.5	2.0
Louisiana	15,776	14,663	13,526	14,267	15,844	7.6	-1
Oklahoma	20,957	19,879	21,584	22,210	19,210	5.4	2.2
Texas	101,759	97,353	95,367	93,642	94,581	4.5	1.8
Mountain	118,198	113,046	101,497	107,497	115,311	4.6	.6
Arizona	19,751	17,351	15,785	16,401	19,169	13.8	.8
Colorado	20,158	19,022	16,920	17,502	17,274	6.0	3.9
Idaho	533	363	333	440	400	46.8	7.5
Montana	10,825	9,617	8,359	9,678	10,729	12.6	.2

See footnotes at end of table.

Table 59. Domestic Distribution of U.S. Coal by Coal-Producing Region and State, and Destination Census Division and State, 1994-1998 (Continued)
(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1998	1997	1996	1995	1994	Percent Change 1997-1998	Average Annual Percent Change
							1994-1998
U.S. Total (Continued)							
Nevada.....	7,976	7,110	7,072	7,479	7,777	12.2	0.6
New Mexico.....	15,950	^R 15,886	15,097	14,727	15,549	.4	.6
Utah.....	15,074	16,775	11,175	14,602	16,015	-10.1	-1.5
Wyoming.....	27,930	26,922	26,757	26,668	28,399	3.7	-4
Pacific.....	14,108	9,596	8,790	11,962	12,228	47.0	3.6
Alaska.....	970	743	697	815	789	30.4	5.3
California.....	4,789	2,794	2,240	2,839	3,096	71.4	11.5
Hawaii.....	34	21	-	-	-	56.8	-
Oregon.....	2,092	1,079	1,028	1,518	2,347	93.8	-2.8
Washington.....	6,224	4,958	4,825	6,790	5,996	25.5	.9

* Data round to zero.

^R Revised Data.

^{NM} Not meaningful as value is greater than 500 percent.

Note: Destination State totals may not sum to the Coal-Producing State totals due to unknown or unavailable Destination State(s). Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, Form EIA-6A, "Coal Distribution Report."

Table 60. Foreign Distribution of U.S. Coal by Major Coal-Exporting States and Destination, 1994-1998
(Thousand Short Tons)

Coal-Exporting State and Destination	1998	1997	1996	1995	1994	Percent Change 1997-1998	Average Annual Percent Change
							1994-1998
Alabama	4,801	5,813	4,864	6,032	4,529	-17.4	1.5
Argentina	305	259	216	306	268	17.7	3.3
Belgium & Luxembourg	701	898	703	574	627	-21.9	2.9
Brazil.....	570	901	566	564	42	-36.8	91.4
Bulgaria.....	145	244	208	128	35	-40.5	42.3
Denmark.....	-	-	-	26	-	-	-
Egypt.....	-	-	-	111	-	-	-
France.....	-	-	-	-	*	-	-
Germany, FR	103	224	184	201	-	-54.2	-
Italy	417	491	659	930	565	-14.9	-7.3
Japan	349	459	861	1,358	1,266	-23.9	-27.5
Netherlands.....	345	303	73	276	88	14.0	40.7
Romania	552	274	170	492	602	101.1	-2.2
South Africa, Rep of.....	-	-	57	-	-	-	-
Spain	248	200	52	48	27	23.7	74.8
Turkey	211	408	326	302	137	-48.3	11.3
United Kingdom.....	855	1,151	789	717	872	-25.7	-5
Alaska	371	680	776	855	716	-45.5	-15.2
Korea, Republic of.....	371	662	776	855	716	-44.0	-15.2
Soviet Union.....	-	18	-	-	-	-100.0	-
Colorado	1,754	^R 1,523	1,415	900	752	15.1	23.6
China (Taiwan).....	-	^R 75	219	235	134	-100.0	-
Hong Kong	-	-	-	-	46	-	-
Israel.....	-	-	30	-	-	-	-
Japan	422	^R 296	343	651	395	42.5	1.7
Korea, Republic of.....	-	-	65	-	177	-	-
Mexico	1,332	1,152	758	-	-	15.6	-
Turkey	-	-	-	14	-	-	-
Illinois	307	773	1,886	2,699	236	-60.3	6.7
Belgium & Luxembourg	-	-	76	-	-	-	-
Brazil.....	-	-	1	-	-	-	-
Denmark.....	-	-	364	516	-	-	-
France.....	-	-	-	57	-	-	-
Germany, FR	-	56	325	722	-	-100.0	-
Italy	-	-	-	42	-	-	-
Japan	99	55	66	49	236	80.5	-19.6
Morocco.....	-	-	103	775	-	-	-
Netherlands.....	-	-	120	-	-	-	-
Sweden.....	-	-	25	-	-	-	-
United Kingdom.....	208	662	805	538	-	-68.6	-
Kentucky	6,931	7,220	9,143	9,695	7,167	-4.0	-8
Belgium & Luxembourg	44	54	67	366	472	-19.6	-44.8
Brazil.....	-	-	-	52	23	-	-
Canada	1,459	739	1,178	777	1,099	97.4	7.3
China (Taiwan).....	1,867	2,292	1,978	2,397	2,643	-18.6	-8.3
Finland	-	-	4	-	-	-	-
France.....	422	569	548	262	146	-25.8	30.4
Germany, FR	71	-	-	187	-	-	-
Iceland.....	62	107	119	76	7	-42.5	71.0
Ireland.....	-	-	-	58	-	-	-
Israel.....	-	-	-	217	-	-	-
Italy	291	182	1,745	1,714	805	60.1	-22.4
Jamaica.....	-	56	17	62	26	-100.0	-
Japan	627	223	93	53	100	180.8	58.1
Korea, Republic of.....	-	795	1,876	1,523	1,163	-100.0	-
Netherlands.....	1,096	1,364	581	621	268	-19.6	42.2
Norway.....	138	198	140	142	74	-30.6	17.0
Portugal.....	-	-	229	-	24	-	-
Saudi Arabia.....	42	48	22	-	-	-12.8	-
Spain	-	-	-	231	-	-	-
Sweden.....	33	-	-	-	16	-	20.4
Turkey	-	-	-	197	-	-	-
United Kingdom.....	781	592	548	758	301	31.9	27.0

See footnotes at end of table.

Table 60. Foreign Distribution of U.S. Coal by Major Coal-Exporting States and Destination, 1994-1998 (Continued)
(Thousand Short Tons)

Coal-Exporting State and Destination	1998	1997	1996	1995	1994	Percent Change 1997-1998	Average Annual Percent Change
							1994-1998
Pennsylvania	7,908	8,698	9,246	8,279	6,301	-9.1	5.8
Belgium & Luxembourg	84	146	-	-	29	-42.2	30.3
Brazil.....	382	715	261	380	338	-46.6	3.1
Canada.....	2,286	2,612	1,050	713	844	-12.5	28.3
Denmark.....	672	467	801	1,589	508	43.9	7.2
Dominican Republic.....	76	64	50	18	65	17.6	3.9
Finland.....	-	229	283	544	71	-100.0	-
France.....	86	-	89	9	-	-	-
Germany, FR.....	775	135	256	383	197	472.2	40.9
Greece.....	-	-	491	-	-	-	-
Ireland.....	1,203	1,116	1,067	1,161	1,015	7.8	4.4
Israel.....	800	861	1,068	995	922	-7.0	-3.5
Italy.....	85	-	89	-	601	-	-38.6
Japan.....	373	903	1,057	916	834	-58.6	-18.2
Korea, Republic of.....	74	175	195	109	214	-57.7	-23.3
Morocco.....	75	118	173	-	-	-36.9	-
Netherlands.....	104	482	732	593	261	-78.5	-20.6
Norway.....	-	11	30	28	14	-100.0	-
Peru.....	71	13	-	-	-	443.9	-
Portugal.....	275	261	592	472	378	5.3	-7.6
South Africa, Rep of.....	366	384	112	-	-	-4.6	-
Spain.....	16	-	-	18	-	-	-
Turkey.....	-	-	-	43	-	-	-
United Kingdom.....	101	-	851	299	-	-	-
Venezuela.....	4	5	1	9	11	-24.3	-24.1
Utah	2,535	3,414	5,305	3,930	2,698	-25.8	-1.5
Chile.....	-	38	445	170	-	-100.0	-
China (Taiwan).....	117	597	648	323	321	-80.4	-22.3
Ecuador.....	-	38	-	-	-	-100.0	-
Japan.....	2,418	2,499	4,058	3,000	2,377	-3.2	.4
Korea, Republic of.....	-	242	154	438	-	-100.0	-
Virginia	12,810	12,841	13,432	9,742	11,683	-.2	2.3
Algeria.....	400	299	206	166	269	33.8	10.4
Argentina.....	-	-	-	-	53	-	-
Belgium & Luxembourg.....	948	945	1,078	764	884	.4	1.8
Brazil.....	2,273	1,347	1,228	1,091	1,218	68.7	16.9
Canada.....	719	508	387	445	786	41.7	-2.2
China (Taiwan).....	179	180	-	-	15	-.5	84.4
Egypt.....	548	178	835	333	436	207.1	5.9
Finland.....	-	55	-	-	-	-100.0	-
France.....	1,964	984	910	625	563	99.6	36.7
Germany, FR.....	-	93	-	68	9	-100.0	-
Italy.....	1,817	2,318	2,198	1,474	1,804	-21.6	.2
Japan.....	218	1,508	2,300	1,796	2,114	-85.6	-43.3
Korea, Republic of.....	1,361	1,272	466	589	539	6.9	26.0
Netherlands.....	455	650	1,193	793	766	-30.0	-12.2
Portugal.....	-	62	145	105	91	-100.0	-
Romania.....	51	72	32	-	223	-29.1	-30.9
South Africa, Rep of.....	-	-	76	-	-	-	-
Spain.....	1,581	1,361	1,370	847	1,297	16.2	5.1
Sweden.....	-	-	185	115	37	-	-
Turkey.....	-	81	24	-	-	-100.0	-
United Kingdom.....	296	928	798	531	579	-68.1	-15.4
West Virginia	37,531	38,459	42,044	44,321	36,205	-2.4	.9
Algeria.....	-	-	-	-	*	-	-
Argentina.....	-	-	-	-	35	-	-
Belgium & Luxembourg.....	774	1,463	2,182	2,020	2,312	-47.1	-23.9
Brazil.....	3,378	3,929	4,256	4,329	4,109	-14.0	-4.8
Bulgaria.....	857	1,008	1,214	1,360	1,571	-15.0	-14.1
Canada.....	10,500	8,291	7,222	5,784	5,644	26.6	16.8
Chile.....	48	25	195	118	-	86.5	-
China (Taiwan).....	139	188	353	355	284	-26.2	-16.4
Croatia.....	-	-	-	72	-	-	-
Denmark.....	-	70	-	189	-	-100.0	-
Egypt.....	413	807	303	714	593	-48.8	-8.7

See footnotes at end of table.

Table 60. Foreign Distribution of U.S. Coal by Major Coal-Exporting States and Destination, 1994-1998 (Continued)
(Thousand Short Tons)

Coal-Exporting State and Destination	1998	1997	1996	1995	1994	Percent Change 1997-1998	Average Annual Percent Change
							1994-1998
West Virginia (Continued)							
Finland	455	324	507	792	375	40.2	4.9
France	2,740	2,579	3,676	4,408	3,514	6.2	-6.0
Germany, FR	349	453	943	1,107	382	-22.9	-2.2
India	-	-	11	-	-	-	-
Israel	101	211	375	-	-	-51.9	-
Italy	2,948	3,879	4,965	5,138	3,634	-24.0	-5.1
Jamaica	30	8	36	-	-	285.6	-
Japan	2,975	2,585	2,062	3,431	2,595	15.1	3.5
Korea, Republic of	879	829	1,050	1,013	523	6.1	13.9
Mexico	256	25	-	-	-	NM	-
Morocco	67	96	1,111	275	101	-30.0	-9.8
Netherlands	2,152	2,425	1,636	3,628	3,340	-11.3	-10.4
Portugal	450	889	1,128	1,390	674	-49.4	-9.6
Romania	491	1,737	1,315	1,623	925	-71.8	-14.7
South Africa, Rep of	992	706	947	946	771	40.5	6.5
Spain	758	758	887	1,084	1,255	.1	-11.8
Sweden	740	657	882	1,352	886	12.7	-4.4
Turkey	1,322	1,295	1,655	1,560	1,468	2.1	-2.6
United Kingdom	3,716	3,223	3,133	1,633	1,212	15.3	32.3
Wyoming	3,729	2,541	2,395	2,269	1,524	46.8	25.1
Canada	1,931	818	443	32	-	136.2	-
Mexico	12	-	-	-	-	-	-
Netherlands	-	-	63	-	-	-	-
Spain	1,786	1,723	1,889	2,237	1,524	3.6	4.0
Major States Total	78,677	R 81,962	90,506	88,722	71,811	-4.0	2.3
Algeria	400	299	206	166	269	33.8	10.4
Argentina	305	259	216	306	356	17.7	-3.8
Belgium & Luxembourg	2,552	3,506	4,106	3,724	4,324	-27.2	-12.3
Brazil	6,603	6,892	6,312	6,416	5,730	-4.2	3.6
Bulgaria	1,002	1,252	1,422	1,488	1,607	-20.0	-11.1
Canada	16,895	12,967	10,280	7,750	8,373	30.3	19.2
Chile	48	64	640	287	-	-25.6	-
China (Taiwan)	2,301	R 3,332	3,197	3,310	3,397	-30.9	-9.3
Croatia	-	-	-	72	-	-	-
Denmark	672	538	1,165	2,320	508	25.0	7.2
Dominican Republic	76	64	50	18	65	17.6	3.9
Ecuador	-	38	-	-	-	-100.0	-
Egypt	961	985	1,138	1,158	1,029	-2.5	-1.7
Finland	455	609	794	1,337	446	-25.3	.5
France	5,212	4,132	5,223	5,362	4,223	26.1	5.4
Germany, FR	1,298	962	1,708	2,668	588	34.9	21.9
Greece	-	-	491	-	-	-	-
Hong Kong	-	-	-	-	46	-	-
Iceland	62	107	119	76	7	-42.5	71.0
India	-	-	11	-	-	-	-
Ireland	1,203	1,116	1,067	1,219	1,015	7.8	4.4
Israel	901	1,071	1,473	1,212	922	-15.9	-5
Italy	5,558	6,869	9,656	9,298	7,409	-19.1	-6.9
Jamaica	30	64	53	62	26	-53.8	3.5
Japan	7,481	R 8,528	10,840	11,254	9,918	-12.3	-6.8
Korea, Republic of	2,684	3,974	4,582	4,526	3,332	-32.5	-5.3
Mexico	1,599	1,177	758	-	-	35.9	-
Morocco	141	214	1,388	1,050	101	-33.8	8.8
Netherlands	4,152	5,224	4,398	5,911	4,723	-20.5	-3.2
Norway	138	210	169	170	88	-34.3	11.9
Peru	71	13	-	-	-	443.9	-
Portugal	725	1,212	2,094	1,967	1,167	-40.2	-11.2
Romania	1,093	2,083	1,517	2,115	1,750	-47.5	-11.1
Saudi Arabia	42	48	22	-	-	-12.8	-
South Africa, Rep of	1,359	1,090	1,192	946	771	24.6	15.2
Soviet Union	-	18	-	-	-	-100.0	-
Spain	4,389	4,042	4,197	4,465	4,103	8.6	1.7
Sweden	773	657	1,091	1,466	939	17.7	-4.7
Turkey	1,533	1,784	2,005	2,116	1,606	-14.0	-1.1
United Kingdom	5,957	6,556	6,925	4,476	2,963	-9.1	19.1
Venezuela	4	5	1	9	11	-24.3	-24.1

See footnotes at end of table.

Table 60. Foreign Distribution of U.S. Coal by Major Coal-Exporting States and Destination, 1994-1998 (Continued)
(Thousand Short Tons)

Coal-Exporting State and Destination	1998	1997	1996	1995	1994	Percent Change 1997-1998	Average Annual Percent Change
							1994-1998
Other States Total	1,508	1,270	1,693	1,185	870	18.8	14.8
Brazil	-	-	-	188	184	-	-
Canada	1,018	438	319	273	93	132.2	81.8
Ireland	20	-	80	-	-	-	-
Japan	-	25	-	-	-	-100.0	-
Mexico	2	-	-	498	-	-	-
Spain	-	-	-	-	153	-	-
Unknown.....	468	806	1,294	226	439	-42.0	1.6
U.S. Total	80,185	^R 83,232	92,199	89,907	72,680	-3.7	2.5
Algeria	400	299	206	166	269	33.8	10.4
Argentina	305	259	216	306	356	17.7	-3.8
Belgium & Luxembourg	2,552	3,506	4,106	3,724	4,324	-27.2	-12.3
Brazil	6,603	6,892	6,312	6,605	5,914	-4.2	2.8
Bulgaria	1,002	1,252	1,422	1,488	1,607	-20.0	-11.1
Canada	17,913	13,405	10,599	8,023	8,467	33.6	20.6
Chile.....	48	64	640	287	-	-25.6	-
China (Taiwan).....	2,301	^R 3,332	3,197	3,310	3,397	-30.9	-9.3
Croatia.....	-	-	-	72	-	-	-
Denmark.....	672	538	1,165	2,320	508	25.0	7.2
Dominican Republic.....	76	64	50	18	65	17.6	3.9
Ecuador	-	38	-	-	-	-100.0	-
Egypt.....	961	985	1,138	1,158	1,029	-2.5	-1.7
Finland	455	609	794	1,337	446	-25.3	.5
France.....	5,212	4,132	5,223	5,362	4,223	26.1	5.4
Germany, FR	1,298	962	1,708	2,668	588	34.9	21.9
Greece	-	-	491	-	-	-	-
Hong Kong	-	-	-	-	46	-	-
Iceland.....	62	107	119	76	7	-42.5	71.0
India	-	-	11	-	-	-	-
Ireland	1,224	1,116	1,147	1,219	1,015	9.6	4.8
Israel.....	901	1,071	1,473	1,212	922	-15.9	-5
Italy	5,558	6,869	9,656	9,298	7,409	-19.1	-6.9
Jamaica.....	30	64	53	62	26	-53.8	3.5
Japan	7,481	^R 8,553	10,840	11,254	9,918	-12.5	-6.8
Korea, Republic of	2,684	3,974	4,582	4,526	3,332	-32.5	-5.3
Mexico	1,601	1,177	758	498	-	36.0	-
Morocco	141	214	1,388	1,050	101	-33.8	8.8
Netherlands	4,152	5,224	4,398	5,911	4,723	-20.5	-3.2
Norway.....	138	210	169	170	88	-34.3	11.9
Peru	71	13	-	-	-	443.9	-
Portugal.....	725	1,212	2,094	1,967	1,167	-40.2	-11.2
Romania.....	1,093	2,083	1,517	2,115	1,750	-47.5	-11.1
Saudi Arabia.....	42	48	22	-	-	-12.8	-
South Africa, Rep of	1,359	1,090	1,192	946	771	24.6	15.2
Soviet Union.....	-	18	-	-	-	-100.0	-
Spain	4,389	4,042	4,197	4,465	4,256	8.6	.8
Sweden.....	773	657	1,091	1,466	939	17.7	-4.7
Turkey	1,533	1,784	2,005	2,116	1,606	-14.0	-1.1
United Kingdom	5,957	6,556	6,925	4,476	2,963	-9.1	19.1
Venezuela.....	4	5	1	9	11	-24.3	-24.1
Unknown.....	468	806	1,294	226	439	-42.0	1.6

* Data round to zero.

^R Revised Data.

^{NM} Not meaningful as value is greater than 500 percent.

Notes: Major coal-exporting States are those with total coal exports of over 600,000 short tons in 1998. Totals may not equal sum of components due to independent rounding.

Sources: Values shown for destinations other than Canada and Mexico are estimates based upon information reported on Energy Information Administration Form EIA-6A, "Coal Distribution Report," and coal export data presented in King's COALBASE (King Publishing Corporation, Knoxville, Tennessee). See the Explanatory Notes for a complete description of the methodology used to develop these estimates. Values shown for Canada and Mexico are based upon Form EIA-6A.

Table 61. Foreign Distribution of U.S. Metallurgical Coal by Major Coal-Exporting States and Destination, 1994-1998
(Thousand Short Tons)

Coal-Exporting State and Destination	1998	1997	1996	1995	1994	Percent Change 1997-1998	Average Annual Percent Change
							1994-1998
Alabama	4,743	5,699	4,523	5,330	4,359	-16.8	2.1
Argentina	305	259	216	306	268	17.7	3.3
Belgium & Luxembourg	701	898	703	574	627	-21.9	2.9
Brazil	570	901	566	564	42	-36.8	91.4
Bulgaria	145	244	208	128	35	-40.5	42.3
Egypt	-	-	-	111	-	-	-
France	-	-	-	-	*	-	-
Germany, FR	103	224	184	201	-	-54.2	-
Italy	417	377	318	314	421	10.7	-2
Japan	349	459	861	1,358	1,266	-23.9	-27.5
Netherlands	345	303	73	217	88	14.0	40.7
Romania	552	274	170	492	602	101.1	-2.2
South Africa, Rep of	-	-	57	-	-	-	-
Spain	248	200	52	48	-	23.7	-
Turkey	211	408	326	302	137	-48.3	11.3
United Kingdom	797	1,151	789	717	872	-30.8	-2.2
Colorado	-	-	30	-	-	-	-
Japan	-	-	30	-	-	-	-
Illinois	-	-	-	49	236	-	-100.0
Japan	-	-	-	49	236	-	-
Kentucky	5,042	4,762	5,303	3,640	3,120	5.9	12.8
Belgium & Luxembourg	44	54	67	-	66	-19.6	-9.7
Brazil	-	-	-	52	23	-	-
Canada	1,459	739	1,178	777	1,073	97.4	8.0
China (Taiwan)	87	181	-	76	98	-52.2	-2.9
France	422	569	548	262	146	-25.8	30.4
Germany, FR	71	-	-	93	-	-	-
Iceland	62	107	119	76	7	-42.5	71.0
Italy	291	-	132	-	42	-	61.8
Japan	518	223	93	53	67	131.8	66.5
Korea, Republic of	-	795	1,876	1,523	1,163	-100.0	-
Netherlands	1,096	1,255	581	102	45	-12.7	122.6
Norway	138	198	140	142	74	-30.6	17.0
Saudi Arabia	42	48	22	-	-	-12.8	-
Sweden	33	-	-	-	16	-	20.4
United Kingdom	781	592	548	483	301	31.9	27.0
Pennsylvania	1,912	2,105	1,642	1,467	1,624	-9.2	4.2
Belgium & Luxembourg	-	-	-	-	29	-	-
Brazil	381	713	258	371	333	-46.6	3.4
Canada	17	-	-	4	-	-	-
Dominican Republic	-	-	-	-	23	-	-
France	-	-	89	-	-	-	-
Germany, FR	598	-	-	66	174	-	36.3
Japan	373	903	920	916	834	-58.6	-18.2
Korea, Republic of	74	106	101	109	214	-29.8	-23.3
Netherlands	102	-	162	-	17	-	55.6
South Africa, Rep of	366	384	112	-	-	-4.6	-
Utah	-	97	187	-	-	-100.0	-
Japan	-	97	187	-	-	-100.0	-
Virginia	12,649	12,288	12,760	8,921	11,155	2.9	3.2
Algeria	400	299	206	166	269	33.8	10.4
Argentina	-	-	-	-	53	-	-
Belgium & Luxembourg	948	945	1,078	764	884	.4	1.8
Brazil	2,273	1,347	1,228	1,091	1,218	68.7	16.9
Canada	719	508	387	445	786	41.7	-2.2
China (Taiwan)	179	180	-	-	15	-5	84.4
Egypt	548	178	835	333	436	207.1	5.9
Finland	-	55	-	-	-	-100.0	-
France	1,964	984	910	625	563	99.6	36.7
Germany, FR	-	93	-	68	9	-100.0	-
Italy	1,655	1,776	1,696	758	1,445	-6.8	3.4
Japan	218	1,508	2,300	1,796	2,037	-85.6	-42.8
Korea, Republic of	1,361	1,272	466	589	539	6.9	26.0

See footnotes at end of table.

Table 61. Foreign Distribution of U.S. Metallurgical Coal by Major Coal-Exporting States and Destination, 1994-1998 (Continued)
(Thousand Short Tons)

Coal-Exporting State and Destination	1998	1997	1996	1995	1994	Percent Change 1997-1998	Average Annual Percent Change
							1994-1998
Virginia (Continued)							
Netherlands	455	650	1,193	793	766	-30.0	-12.2
Portugal	-	62	-	-	-	-100.0	-
Romania	51	72	32	-	223	-29.1	-30.9
South Africa, Rep of	-	-	76	-	-	-	-
Spain	1,581	1,350	1,370	847	1,297	17.2	5.1
Sweden	-	-	185	115	37	-	-
Turkey	-	81	-	-	-	-100.0	-
United Kingdom	296	928	798	531	579	-68.1	-15.4
West Virginia	32,224	30,327	31,717	34,633	31,603	6.3	.5
Algeria	-	-	-	-	*	-	-
Argentina	-	-	-	-	35	-	-
Belgium & Luxembourg	602	822	1,261	1,175	1,302	-26.7	-17.5
Brazil	3,378	3,927	4,247	4,329	4,109	-14.0	-4.8
Bulgaria	857	1,008	1,152	1,360	1,571	-15.0	-14.1
Canada	8,945	6,956	6,907	5,759	5,605	28.6	12.4
Chile	-	-	43	-	-	-	-
China (Taiwan)	139	188	353	355	284	-26.2	-16.4
Egypt	413	807	303	714	593	-48.8	-8.7
Finland	455	324	507	683	375	40.2	4.9
France	2,740	2,286	2,859	3,594	3,514	19.9	-6.0
Germany, FR	349	419	584	254	382	-16.6	-2.2
India	-	-	11	-	-	-	-
Italy	2,326	2,084	2,361	2,873	2,927	11.6	-5.6
Japan	2,975	2,585	2,062	3,222	2,148	15.1	8.5
Korea, Republic of	879	829	1,050	1,013	523	6.1	13.9
Mexico	-	25	-	-	-	-100.0	-
Netherlands	1,979	1,977	1,223	1,523	1,717	.1	3.6
Portugal	245	118	164	33	-	107.6	-
Romania	491	1,737	1,315	1,623	925	-71.8	-14.7
South Africa, Rep of	992	706	947	946	771	40.5	6.5
Spain	758	681	818	1,084	1,255	11.4	-11.8
Sweden	740	657	882	1,352	886	12.7	-4.4
Turkey	1,322	1,295	1,643	1,560	1,468	2.1	-2.6
United Kingdom	1,637	897	1,024	1,182	1,212	82.6	7.8
Major States Total	56,569	55,278	56,162	54,039	52,098	2.3	2.1
Algeria	400	299	206	166	269	33.8	10.4
Argentina	305	259	216	306	356	17.7	-3.8
Belgium & Luxembourg	2,296	2,719	3,109	2,513	2,908	-15.6	-5.7
Brazil	6,602	6,888	6,298	6,407	5,725	-4.2	3.6
Bulgaria	1,002	1,252	1,361	1,488	1,607	-20.0	-11.1
Canada	11,140	8,203	8,472	6,986	7,464	35.8	10.5
Chile	-	-	43	-	-	-	-
China (Taiwan)	404	549	353	431	397	-26.3	.5
Dominican Republic	-	-	-	-	23	-	-
Egypt	961	985	1,138	1,158	1,029	-2.5	-1.7
Finland	455	379	507	683	375	19.9	4.9
France	5,126	3,839	4,406	4,481	4,223	33.5	5.0
Germany, FR	1,121	736	769	681	565	52.4	18.7
Iceland	62	107	119	76	7	-42.5	71.0
India	-	-	11	-	-	-	-
Italy	4,690	4,238	4,507	3,944	4,836	10.7	-8
Japan	4,433	5,775	6,453	7,395	6,588	-23.2	-9.4
Korea, Republic of	2,313	3,001	3,493	3,234	2,438	-22.9	-1.3
Mexico	-	25	-	-	-	-100.0	-
Netherlands	3,977	4,185	3,233	2,635	2,633	-5.0	10.9
Norway	138	198	140	142	74	-30.6	17.0
Portugal	245	179	164	33	-	36.3	-
Romania	1,093	2,083	1,517	2,115	1,750	-47.5	-11.1
Saudi Arabia	42	48	22	-	-	-12.8	-
South Africa, Rep of	1,359	1,090	1,192	946	771	24.6	15.2
Spain	2,587	2,231	2,240	1,979	2,552	16.0	.3
Sweden	773	657	1,066	1,466	939	17.7	-4.7
Turkey	1,533	1,784	1,969	1,862	1,606	-14.0	-1.1
United Kingdom	3,512	3,568	3,160	2,913	2,963	-1.6	4.3

See footnotes at end of table.

Table 61. Foreign Distribution of U.S. Metallurgical Coal by Major Coal-Exporting States and Destination, 1994-1998 (Continued)
(Thousand Short Tons)

Coal-Exporting State and Destination	1998	1997	1996	1995	1994	Percent Change 1997-1998	Average Annual Percent Change
							1994-1998
Other States Total	-	-	-	188	184	-	-100.0
Brazil.....	-	-	-	188	184	-	-
U.S. Total	56,569	55,278	56,162	54,228	52,282	2.3	2.0
Algeria	400	299	206	166	269	33.8	10.4
Argentina	305	259	216	306	356	17.7	-3.8
Belgium & Luxembourg	2,296	2,719	3,109	2,513	2,908	-15.6	-5.7
Brazil.....	6,602	6,888	6,298	6,596	5,909	-4.2	2.8
Bulgaria.....	1,002	1,252	1,361	1,488	1,607	-20.0	-11.1
Canada	11,140	8,203	8,472	6,986	7,464	35.8	10.5
Chile.....	-	-	43	-	-	-	-
China (Taiwan).....	404	549	353	431	397	-26.3	.5
Dominican Republic.....	-	-	-	-	23	-	-
Egypt.....	961	985	1,138	1,158	1,029	-2.5	-1.7
Finland	455	379	507	683	375	19.9	4.9
France.....	5,126	3,839	4,406	4,481	4,223	33.5	5.0
Germany, FR	1,121	736	769	681	565	52.4	18.7
Iceland.....	62	107	119	76	7	-42.5	71.0
India	-	-	11	-	-	-	-
Italy	4,690	4,238	4,507	3,944	4,836	10.7	-8
Japan	4,433	5,775	6,453	7,395	6,588	-23.2	-9.4
Korea, Republic of	2,313	3,001	3,493	3,234	2,438	-22.9	-1.3
Mexico.....	-	25	-	-	-	-100.0	-
Netherlands.....	3,977	4,185	3,233	2,635	2,633	-5.0	10.9
Norway.....	138	198	140	142	74	-30.6	17.0
Portugal.....	245	179	164	33	-	36.3	-
Romania.....	1,093	2,083	1,517	2,115	1,750	-47.5	-11.1
Saudi Arabia.....	42	48	22	-	-	-12.8	-
South Africa, Rep of.....	1,359	1,090	1,192	946	771	24.6	15.2
Spain	2,587	2,231	2,240	1,979	2,552	16.0	.3
Sweden.....	773	657	1,066	1,466	939	17.7	-4.7
Turkey.....	1,533	1,784	1,969	1,862	1,606	-14.0	-1.1
United Kingdom.....	3,512	3,568	3,160	2,913	2,963	-1.6	4.3

* Data round to zero.

Notes: Major coal-exporting States are those with total coal exports of over 600,000 short tons in 1998. Totals may not equal sum of components due to independent rounding.

Sources: Values shown for destinations other than Canada and Mexico are estimates based upon information reported on Energy Information Administration Form EIA-6A, "Coal Distribution Report," and coal export data presented in King's COALBASE (King Publishing Corporation, Knoxville, Tennessee). See the Explanatory Notes for a complete description of the methodology used to develop these estimates. Values shown for Canada and Mexico are based upon Form EIA-6A.

Table 62. Foreign Distribution of U.S. Steam Coal by Major Coal-Exporting States and Destination, 1994-1998
(Thousand Short Tons)

Coal-Exporting State and Destination	1998	1997	1996	1995	1994	Percent Change 1997-1998	Average Annual Percent Change
							1994-1998
Alabama	59	114	341	702	170	-48.5	-23.4
Denmark.....	-	-	-	26	-	-	-
Italy	-	114	341	617	144	-100.0	-
Netherlands	-	-	-	59	-	-	-
Spain	-	-	-	-	27	-	-
United Kingdom	59	-	-	-	-	-	-
Alaska	371	680	776	855	716	-45.5	-15.2
Korea, Republic of	371	662	776	855	716	-44.0	-15.2
Soviet Union	-	18	-	-	-	-100.0	-
Colorado	1,754	^R 1,523	1,385	900	752	15.1	23.6
China (Taiwan).....	-	^R 75	219	235	134	-100.0	-
Hong Kong	-	-	-	-	46	-	-
Israel.....	-	-	30	-	-	-	-
Japan	422	^R 296	314	651	395	42.5	1.7
Korea, Republic of	-	-	65	-	177	-	-
Mexico	1,332	1,152	758	-	-	15.6	-
Turkey	-	-	-	14	-	-	-
Illinois	307	773	1,886	2,650	-	-60.3	-
Belgium & Luxembourg	-	-	76	-	-	-	-
Brazil.....	-	-	1	-	-	-	-
Denmark.....	-	-	364	516	-	-	-
France.....	-	-	-	57	-	-	-
Germany, FR	-	56	325	722	-	-100.0	-
Italy	-	-	-	42	-	-	-
Japan	99	55	66	-	-	80.5	-
Morocco.....	-	-	103	775	-	-	-
Netherlands	-	-	120	-	-	-	-
Sweden.....	-	-	25	-	-	-	-
United Kingdom	208	662	805	538	-	-68.6	-
Kentucky	1,889	2,458	3,841	6,055	4,047	-23.1	-17.3
Belgium & Luxembourg	-	-	-	366	406	-	-
Canada	-	-	-	-	26	-	-
China (Taiwan).....	1,780	2,111	1,978	2,321	2,545	-15.7	-8.5
Finland	-	-	4	-	-	-	-
Germany, FR	-	-	-	95	-	-	-
Ireland	-	-	-	58	-	-	-
Israel.....	-	-	-	217	-	-	-
Italy	-	182	1,613	1,714	763	-100.0	-
Jamaica.....	-	56	17	62	26	-100.0	-
Japan	109	-	-	-	33	-	34.8
Netherlands	-	109	-	519	223	-100.0	-
Portugal.....	-	-	229	-	24	-	-
Spain	-	-	-	231	-	-	-
Turkey	-	-	-	197	-	-	-
United Kingdom	-	-	-	275	-	-	-
Pennsylvania	5,996	6,593	7,604	6,812	4,677	-9.0	6.4
Belgium & Luxembourg	84	146	-	-	-	-42.2	-
Brazil.....	1	2	3	9	5	-49.5	-30.5
Canada	2,269	2,612	1,050	708	844	-13.1	28.1
Denmark.....	672	467	801	1,589	508	43.9	7.2
Dominican Republic.....	76	64	50	18	42	17.6	16.1
Finland	-	229	283	544	71	-100.0	-
France.....	86	-	-	9	-	-	-
Germany, FR	177	135	256	317	23	30.4	66.1
Greece	-	-	491	-	-	-	-
Ireland	1,203	1,116	1,067	1,161	1,015	7.8	4.4
Israel.....	800	861	1,068	995	922	-7.0	-3.5
Italy	85	-	89	-	601	-	-38.6
Japan	-	-	136	-	-	-	-
Korea, Republic of	-	70	94	-	-	-100.0	-
Morocco.....	75	118	173	-	-	-36.9	-
Netherlands	1	482	570	593	244	-99.7	-72.7
Norway.....	-	11	30	28	14	-100.0	-
Peru	71	13	-	-	-	443.9	-

See footnotes at end of table.

Table 62. Foreign Distribution of U.S. Steam Coal by Major Coal-Exporting States and Destination, 1994-1998 (Continued)
(Thousand Short Tons)

Coal-Exporting State and Destination	1998	1997	1996	1995	1994	Percent Change 1997-1998	Average Annual Percent Change
							1994-1998
Pennsylvania (Continued)							
Portugal.....	275	261	592	472	378	5.3	-7.6
Spain.....	16	-	-	18	-	-	-
Turkey.....	-	-	-	43	-	-	-
United Kingdom.....	101	-	851	299	-	-	-
Venezuela.....	4	5	1	9	11	-24.3	-24.1
Utah.....	2,535	3,317	5,118	3,930	2,698	-23.6	-1.5
Chile.....	-	38	445	170	-	-100.0	-
China (Taiwan).....	117	597	648	323	321	-80.4	-22.3
Ecuador.....	-	38	-	-	-	-100.0	-
Japan.....	2,418	2,402	3,871	3,000	2,377	.7	.4
Korea, Republic of.....	-	242	154	438	-	-100.0	-
Virginia.....	162	553	671	821	527	-70.7	-25.6
Italy.....	162	542	502	716	359	-70.1	-18.0
Japan.....	-	-	-	-	77	-	-
Portugal.....	-	-	145	105	91	-	-
Spain.....	-	11	-	-	-	-100.0	-
Turkey.....	-	-	24	-	-	-	-
West Virginia.....	5,307	8,132	10,327	9,688	4,602	-34.7	3.6
Belgium & Luxembourg.....	172	641	921	845	1,010	-73.1	-35.7
Brazil.....	-	2	10	*	-	-100.0	-
Bulgaria.....	-	-	62	-	-	-	-
Canada.....	1,555	1,335	315	25	40	16.5	150.0
Chile.....	48	25	152	118	-	86.5	-
Croatia.....	-	-	-	72	-	-	-
Denmark.....	-	70	-	189	-	-100.0	-
Finland.....	-	-	-	109	-	-	-
France.....	-	293	817	815	-	-100.0	-
Germany, FR.....	-	35	358	854	-	-100.0	-
Israel.....	101	211	375	-	-	-51.9	-
Italy.....	621	1,794	2,604	2,266	707	-65.4	-3.2
Jamaica.....	30	8	36	-	-	285.6	-
Japan.....	-	-	-	209	448	-	-
Mexico.....	256	-	-	-	-	-	-
Morocco.....	67	96	1,111	275	101	-30.0	-9.8
Netherlands.....	173	448	413	2,105	1,623	-61.3	-42.8
Portugal.....	206	771	964	1,357	674	-73.3	-25.7
Spain.....	-	77	69	-	-	-100.0	-
Turkey.....	-	-	12	-	-	-	-
United Kingdom.....	2,079	2,326	2,109	451	-	-10.6	-
Wyoming.....	3,729	2,541	2,395	2,269	1,524	46.8	25.1
Canada.....	1,931	818	443	32	-	136.2	-
Mexico.....	12	-	-	-	-	-	-
Netherlands.....	-	-	63	-	-	-	-
Spain.....	1,786	1,723	1,889	2,237	1,524	3.6	4.0
Major States Total.....	22,108	26,684	34,344	34,683	19,713	-17.1	2.9
Belgium & Luxembourg.....	256	787	997	1,211	1,416	-67.4	-34.8
Brazil.....	1	4	14	9	5	-72.1	-30.5
Bulgaria.....	-	-	62	-	-	-	-
Canada.....	5,754	4,764	1,808	765	910	20.8	58.6
Chile.....	48	64	597	287	-	-25.6	-
China (Taiwan).....	1,897	2,783	2,845	2,879	3,000	-31.8	-10.8
Croatia.....	-	-	-	72	-	-	-
Denmark.....	672	538	1,165	2,320	508	25.0	7.2
Dominican Republic.....	76	64	50	18	42	17.6	16.1
Ecuador.....	-	38	-	-	-	-100.0	-
Finland.....	-	229	287	654	71	-100.0	-
France.....	86	293	817	882	-	-70.6	-
Germany, FR.....	177	226	939	1,987	23	-21.9	66.1
Greece.....	-	-	491	-	-	-	-
Hong Kong.....	-	-	-	-	46	-	-
Ireland.....	1,203	1,116	1,067	1,219	1,015	7.8	4.4
Israel.....	901	1,071	1,473	1,212	922	-15.9	-5

See footnotes at end of table.

Table 62. Foreign Distribution of U.S. Steam Coal by Major Coal-Exporting States and Destination, 1994-1998 (Continued)
(Thousand Short Tons)

Coal-Exporting State and Destination	1998	1997	1996	1995	1994	Percent Change 1997-1998	Average Annual Percent Change
							1994-1998
Major States Total (Continued)							
Italy	868	2,632	5,149	5,354	2,573	-67.0	-23.8
Jamaica.....	30	64	53	62	26	-53.8	3.5
Japan	3,048	R 2,753	4,387	3,860	3,330	10.7	-2.2
Korea, Republic of	371	973	1,089	1,292	894	-61.9	-19.7
Mexico	1,599	1,152	758	-	-	38.8	-
Morocco	141	214	1,388	1,050	101	-33.8	8.8
Netherlands	175	1,039	1,165	3,276	2,090	-83.2	-46.2
Norway.....	-	11	30	28	14	-100.0	-
Peru	71	13	-	-	-	443.9	-
Portugal.....	481	1,032	1,930	1,933	1,167	-53.5	-19.9
Soviet Union.....	-	18	-	-	-	-100.0	-
Spain	1,802	1,811	1,957	2,486	1,550	-.5	3.8
Sweden.....	-	-	25	-	-	-	-
Turkey	-	-	37	254	-	-	-
United Kingdom.....	2,446	2,988	3,765	1,563	-	-18.1	-
Venezuela.....	4	5	1	9	11	-24.3	-24.1
Other States Total	1,508	1,270	1,693	997	686	18.8	21.8
Canada	1,018	438	319	273	93	132.2	81.8
Ireland	20	-	80	-	-	-	-
Japan	-	25	-	-	-	-100.0	-
Mexico	2	-	-	498	-	-	-
Spain	-	-	-	-	153	-	-
Unknown.....	468	806	1,294	226	439	-42.0	1.6
U.S. Total	23,616	R 27,954	36,037	35,680	20,399	-15.5	3.7
Belgium & Luxembourg	256	787	997	1,211	1,416	-67.4	-34.8
Brazil.....	1	4	14	9	5	-72.1	-30.5
Bulgaria.....	-	-	62	-	-	-	-
Canada	6,772	5,202	2,127	1,037	1,003	30.2	61.2
Chile.....	48	64	597	287	-	-25.6	-
China (Taiwan).....	1,897	R 2,783	2,845	2,879	3,000	-31.8	-10.8
Croatia.....	-	-	-	72	-	-	-
Denmark.....	672	538	1,165	2,320	508	25.0	7.2
Dominican Republic.....	76	64	50	18	42	17.6	16.1
Ecuador	-	38	-	-	-	-100.0	-
Finland.....	-	229	287	654	71	-100.0	-
France.....	86	293	817	882	-	-70.6	-
Germany, FR	177	226	939	1,987	23	-21.9	66.1
Greece	-	-	491	-	-	-	-
Hong Kong	-	-	-	-	46	-	-
Ireland	1,224	1,116	1,147	1,219	1,015	9.6	4.8
Israel.....	901	1,071	1,473	1,212	922	-15.9	-5
Italy	868	2,632	5,149	5,354	2,573	-67.0	-23.8
Jamaica.....	30	64	53	62	26	-53.8	3.5
Japan	3,048	R 2,778	4,387	3,860	3,330	9.7	-2.2
Korea, Republic of	371	973	1,089	1,292	894	-61.9	-19.7
Mexico	1,601	1,152	758	498	-	39.0	-
Morocco	141	214	1,388	1,050	101	-33.8	8.8
Netherlands	175	1,039	1,165	3,276	2,090	-83.2	-46.2
Norway.....	-	11	30	28	14	-100.0	-
Peru	71	13	-	-	-	443.9	-
Portugal.....	481	1,032	1,930	1,933	1,167	-53.5	-19.9
Soviet Union.....	-	18	-	-	-	-100.0	-
Spain	1,802	1,811	1,957	2,486	1,704	-.5	1.4
Sweden.....	-	-	25	-	-	-	-
Turkey	-	-	37	254	-	-	-
United Kingdom.....	2,446	2,988	3,765	1,563	-	-18.1	-
Venezuela.....	4	5	1	9	11	-24.3	-24.1
Unknown.....	468	806	1,294	226	439	-42.0	1.6

* Data round to zero.

R Revised Data.

Notes: Major coal-exporting States are those with total coal exports of over 600,000 short tons in 1998. Totals may not equal sum of components due to independent rounding.

Sources: Values shown for destinations other than Canada and Mexico are estimates based upon information reported on Energy Information Administration Form EIA-6A, "Coal Distribution Report," and coal export data presented in King's COALBASE (King Publishing Corporation, Knoxville, Tennessee). See the Explanatory Notes for a complete description of the methodology used to develop these estimates. Values shown for Canada and Mexico are based upon Form EIA-6A.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: ALABAMA					
Alabama	15,791	643	1,388	9	17,831
Railroad.....	7,988	436	53	—	8,477
River.....	4,271	—	—	—	4,271
Truck.....	3,531	207	1,335	9	5,083
Arkansas	64	—	15	—	78
Railroad.....	64	—	—	—	64
Truck.....	—	—	15	—	15
Florida	24	—	—	—	24
River.....	24	—	—	—	24
Georgia	72	—	2	—	74
Railroad.....	72	—	—	—	72
Truck.....	—	—	2	—	2
Illinois	—	71	—	—	71
Railroad.....	—	71	—	—	71
Indiana	—	58	—	—	58
Railroad.....	—	58	—	—	58
Mississippi	—	—	73	—	73
Truck.....	—	—	73	—	73
Unknown State	—	—	—	—	1 35
Unknown.....	—	—	—	—	1 35
State Total	15,951	772	1,478	9	1 18,245
Railroad.....	8,124	565	53	—	8,742
River.....	4,296	—	—	—	4,296
Truck.....	3,531	207	1,425	9	5,173
Unknown.....	—	—	—	—	1 35
ORIGIN: ALASKA					
Alaska	440	—	—	530	970
Railroad.....	138	—	—	467	606
Truck.....	301	—	—	63	364
State Total	440	—	—	530	970
Railroad.....	138	—	—	467	606
Truck.....	301	—	—	63	364
ORIGIN: ARIZONA					
Arizona	7,680	—	—	—	7,680
Railroad.....	7,680	—	—	—	7,680
Nevada	4,489	—	—	—	4,489
Tramway, Conveyor, and Slurry Pipeline.....	4,489	—	—	—	4,489
State Total	12,169	—	—	—	12,169
Railroad.....	7,680	—	—	—	7,680
Tramway, Conveyor, and Slurry Pipeline.....	4,489	—	—	—	4,489
ORIGIN: ARKANSAS					
Maryland	—	—	1	—	1
Truck.....	—	—	1	—	1
Missouri	—	—	19	—	19
Truck.....	—	—	19	—	19
Texas	—	—	3	—	3
Truck.....	—	—	3	—	3
State Total	—	—	23	—	23
Truck.....	—	—	23	—	23
ORIGIN: COLORADO					
Alabama	427	—	—	—	427
Railroad.....	427	—	—	—	427
Arizona	355	—	112	*	467
Railroad.....	355	—	112	—	467
Truck.....	—	—	—	*	*

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: COLORADO (Continued)					
Arkansas	5	-	-	-	5
Railroad.....	5	-	-	-	5
California	-	-	78	-	78
Railroad.....	-	-	78	-	78
Colorado	11,435	-	543	14	² 11,993
Railroad.....	7,019	-	354	-	7,373
Truck.....	4,415	-	189	14	4,618
Unknown.....	-	-	-	-	2 2
Illinois	2,234	-	199	-	2,433
Railroad.....	1,610	-	197	-	1,807
River.....	625	-	1	-	626
Indiana	-	51	-	-	51
Railroad.....	-	51	-	-	51
Iowa	471	-	124	-	595
Railroad.....	20	-	124	-	144
River.....	451	-	-	-	451
Kansas	1,289	-	-	-	1,289
Railroad.....	1,289	-	-	-	1,289
Kentucky	1,962	-	-	-	1,962
Railroad.....	1,952	-	-	-	1,952
River.....	10	-	-	-	10
Michigan	33	-	143	-	176
Great Lakes.....	33	-	143	-	176
Missouri	14	-	-	-	14
Railroad.....	14	-	-	-	14
Montana	6	-	-	-	6
Railroad.....	6	-	-	-	6
Nebraska	6	-	91	-	97
Railroad.....	6	-	91	-	97
Nevada	20	-	-	-	20
Railroad.....	20	-	-	-	20
New Mexico	57	-	73	*	131
Truck.....	57	-	73	*	131
Tennessee	2,064	-	-	-	2,064
Railroad.....	2,064	-	-	-	2,064
Texas	3,189	-	120	-	3,309
Railroad.....	3,189	-	120	-	3,309
Utah	1,797	441	-	-	2,238
Railroad.....	1,797	441	-	-	2,238
Washington	4	-	3	-	7
Railroad.....	4	-	3	-	7
Wisconsin	20	-	-	-	20
Railroad.....	20	-	-	-	20
Wyoming	-	-	149	-	149
Truck.....	-	-	149	-	149
Unknown State	-	-	-	-	¹ 11
Unknown.....	-	-	-	-	1 11
State Total	25,387	492	1,634	15	³ 27,541
Railroad.....	19,797	492	1,078	-	21,367
River.....	1,086	-	1	-	1,087
Great Lakes.....	33	-	143	-	176
Truck.....	4,472	-	412	15	4,898
Unknown.....	-	-	-	-	³ 13
ORIGIN: ILLINOIS					
Alabama	809	-	-	-	809
Railroad.....	269	-	-	-	269
River.....	540	-	-	-	540
Arkansas	-	-	12	-	12
Railroad.....	-	-	12	-	12
Florida	6,265	-	-	-	6,265
Railroad.....	1,330	-	-	-	1,330
River.....	4,935	-	-	-	4,935
Georgia	676	-	-	-	676
Railroad.....	676	-	-	-	676

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: ILLINOIS (Continued)					
Illinois	13,763	-	2,675	215	16,652
Railroad	9,054	-	1,220	-	10,274
River	520	-	19	29	568
Truck	4,188	-	1,410	186	5,784
Tramway, Conveyor, and Slurry Pipeline	-	-	27	-	27
Indiana	4,001	-	181	3	4,184
Railroad	3,791	-	-	-	3,791
River	38	-	8	3	49
Truck	172	-	173	-	344
Iowa	241	-	699	10	949
Railroad	-	-	299	-	299
River	241	-	219	10	469
Truck	-	-	181	-	181
Kansas	41	-	-	-	41
Railroad	41	-	-	-	41
Kentucky	684	-	-	2	686
Railroad	684	-	-	-	684
River	-	-	-	2	2
Truck	-	-	-	*	*
Louisiana	1,113	-	-	-	1,113
River	1,113	-	-	-	1,113
Minnesota	104	-	-	-	104
Railroad	87	-	-	-	87
River	17	-	-	-	17
Mississippi	1,458	-	80	-	1,538
River	822	-	80	-	902
Tidewater	636	-	-	-	636
Missouri	1,892	-	626	156	2,674
Railroad	1,471	-	-	-	1,471
River	341	-	35	-	376
Truck	80	-	591	156	826
North Dakota	-	-	-	*	*
Truck	-	-	-	*	*
Ohio	2	-	-	-	2
River	2	-	-	-	2
Tennessee	2,757	-	*	6	2,762
Railroad	331	-	-	-	331
River	2,425	-	*	6	2,431
West Virginia	-	-	-	*	*
Truck	-	-	-	*	*
Wisconsin	847	-	122	-	969
Railroad	38	-	91	-	130
River	809	-	-	-	809
Great Lakes	-	-	31	-	31
Unknown State	-	-	-	-	1 12
Unknown	-	-	-	-	1 12
State Total	34,651	-	4,394	390	1 39,447
Railroad	17,772	-	1,622	-	19,394
River	11,803	-	361	49	12,212
Great Lakes	-	-	31	-	31
Tidewater	636	-	-	-	636
Truck	4,439	-	2,354	341	7,135
Tramway, Conveyor, and Slurry Pipeline	-	-	27	-	27
Unknown	-	-	-	-	1 12
ORIGIN: INDIANA					
Florida	41	-	-	-	41
River	41	-	-	-	41
Illinois	1,636	-	171	*	1,807
Railroad	1,597	-	144	-	1,741
Truck	39	-	27	*	67
Indiana	30,294	-	2,246	332	32,872
Railroad	21,450	-	949	*	22,400
River	117	-	283	-	400
Truck	7,987	-	1,014	332	9,333
Tramway, Conveyor, and Slurry Pipeline	739	-	-	-	739

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: INDIANA (Continued)					
Iowa	117	-	142	-	259
Railroad.....	117	-	142	-	259
Kentucky	1,084	-	8	-	1,093
River.....	562	-	4	-	567
Truck.....	522	-	4	-	526
Michigan	120	-	28	-	148
Great Lakes.....	120	-	28	-	148
Minnesota	67	-	-	-	67
Railroad.....	67	-	-	-	67
Missouri	148	-	4	-	152
River.....	148	-	-	-	148
Truck.....	-	-	4	-	4
Ohio	7	-	-	-	7
River.....	7	-	-	-	7
Oklahoma	-	-	1	-	1
River.....	-	-	1	-	1
Tennessee	47	-	-	-	47
River.....	47	-	-	-	47
Wisconsin	174	-	71	-	245
Railroad.....	174	-	71	-	245
Unknown State	-	-	-	-	1 36
Unknown.....	-	-	-	-	1 36
State Total	33,735	-	2,671	332	¹ 36,774
Railroad.....	23,405	-	1,306	*	24,711
River.....	923	-	288	-	1,210
Great Lakes.....	120	-	28	-	148
Truck.....	8,548	-	1,049	332	9,929
Tramway, Conveyor, and Slurry Pipeline.....	739	-	-	-	739
Unknown.....	-	-	-	-	1 36
ORIGIN: KANSAS					
Kansas	351	-	15	-	366
Truck.....	351	-	15	-	366
Missouri	73	-	1	-	74
Truck.....	73	-	1	-	74
State Total	424	-	16	-	440
Truck.....	424	-	16	-	440
ORIGIN: KENTUCKY, TOTAL					
Alabama	2,383	14	457	1	2,855
Railroad.....	497	14	432	-	943
River.....	1,887	-	6	-	1,893
Truck.....	-	-	18	1	19
Connecticut	460	-	-	-	460
Railroad.....	40	-	-	-	40
Tidewater.....	420	-	-	-	420
Delaware	92	-	-	-	92
Railroad.....	92	-	-	-	92
Florida	15,162	-	990	6	16,157
Railroad.....	12,439	-	601	6	13,046
River.....	1,793	-	390	-	2,183
Tidewater.....	890	-	-	-	890
Truck.....	39	-	-	-	39
Georgia	15,441	-	1,066	-	16,507
Railroad.....	15,441	-	914	-	16,355
Truck.....	-	-	152	-	152
Illinois	385	-	578	22	985
Railroad.....	385	-	102	-	487
River.....	-	-	375	22	397
Truck.....	-	-	101	*	101
Indiana	1,151	416	1,456	1	3,023
Railroad.....	105	416	778	-	1,299
River.....	1,039	-	217	-	1,256
Truck.....	7	-	460	1	468

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: KENTUCKY, TOTAL (Continued)					
Iowa	387	-	194	156	738
Railroad.....	17	-	5	-	22
River.....	371	-	189	156	716
Truck.....	-	-	-	*	*
Kentucky	28,192	428	896	165	29,690
Railroad.....	4,813	428	49	1	5,291
River.....	12,090	-	179	-	12,269
Truck.....	11,288	-	668	163	12,119
Unknown.....	-	-	-	-	2 10
Louisiana	661	-	11	-	672
River.....	661	-	11	-	672
Maine	-	-	249	-	249
Tidewater.....	-	-	249	-	249
Maryland	349	-	-	-	349
Railroad.....	*	-	-	-	*
Tidewater.....	349	-	-	-	349
Massachusetts	227	-	-	16	243
Railroad.....	189	-	-	16	206
Tidewater.....	37	-	-	-	37
Michigan	5,277	901	1,110	140	7,427
Railroad.....	4,881	567	404	140	5,991
Great Lakes.....	371	334	693	-	1,398
Truck.....	25	-	13	*	38
Minnesota	9	-	74	11	93
Railroad.....	5	-	1	-	6
River.....	4	-	55	11	70
Great Lakes.....	-	-	17	-	17
Truck.....	-	-	*	-	*
Mississippi	955	-	25	-	980
Railroad.....	952	-	-	-	952
River.....	3	-	25	-	28
Missouri	336	-	45	*	381
Railroad.....	109	-	-	-	109
River.....	227	-	45	-	272
Truck.....	-	-	-	*	*
New Jersey	-	-	26	-	26
Truck.....	-	-	26	-	26
New York	1,133	609	29	47	1,818
Railroad.....	1,068	609	27	5	1,709
River.....	-	-	2	-	2
Great Lakes.....	65	-	-	-	65
Truck.....	-	-	-	43	43
North Carolina	15,716	-	1,372	91	17,179
Railroad.....	15,628	-	1,128	90	16,847
River.....	-	-	1	-	1
Truck.....	89	-	243	*	332
Ohio	7,799	288	873	116	9,074
Railroad.....	911	288	320	-	1,519
River.....	5,726	-	141	43	5,909
Great Lakes.....	835	-	38	-	872
Truck.....	327	-	374	73	774
Oklahoma	-	-	27	-	27
River.....	-	-	27	-	27
Oregon	-	-	14	-	14
Railroad.....	-	-	14	-	14
Pennsylvania	40	312	363	51	766
Railroad.....	17	46	37	42	141
River.....	-	257	254	-	511
Truck.....	23	10	71	9	114
South Carolina	11,423	-	1,627	9	13,060
Railroad.....	11,423	-	1,583	9	13,015
Truck.....	-	-	44	*	44
South Dakota	-	-	7	-	7
River.....	-	-	7	-	7
Tennessee	13,244	-	2,093	18	15,355
Railroad.....	8,862	-	1,195	12	10,069
River.....	1,923	-	225	-	2,148
Truck.....	2,459	-	674	6	3,139

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: KENTUCKY, TOTAL (Continued)					
Virginia	5,590	—	724	85	6,400
Railroad.....	5,565	—	711	55	6,331
Truck.....	25	—	13	30	68
West Virginia	6	33	330	1	370
Railroad.....	3	33	44	—	80
River.....	4	—	4	—	8
Truck.....	—	—	282	1	283
Wisconsin	155	—	621	128	903
Railroad.....	*	—	261	1	262
River.....	14	—	32	126	172
Great Lakes.....	141	—	327	—	469
Truck.....	—	—	—	*	*
Unknown State	—	—	—	—	1 270
Unknown.....	—	—	—	—	1 270
State Total	126,574	3,000	15,255	1,062	³ 146,171
Railroad.....	83,442	2,399	8,608	377	94,826
River.....	25,742	257	2,183	358	28,540
Great Lakes.....	1,411	334	1,075	—	2,821
Tidewater.....	1,696	—	249	—	1,945
Truck.....	14,283	10	3,140	327	17,759
Unknown.....	—	—	—	—	³ 280
ORIGIN: KENTUCKY, EASTERN					
Alabama	567	14	457	1	1,039
Railroad.....	497	14	432	—	943
River.....	70	—	6	—	77
Truck.....	—	—	18	1	19
Connecticut	460	—	—	—	460
Railroad.....	40	—	—	—	40
Tidewater.....	420	—	—	—	420
Delaware	92	—	—	—	92
Railroad.....	92	—	—	—	92
Florida	12,907	—	990	6	13,902
Railroad.....	11,736	—	601	6	12,342
River.....	242	—	390	—	631
Tidewater.....	890	—	—	—	890
Truck.....	39	—	—	—	39
Georgia	15,441	—	1,066	—	16,507
Railroad.....	15,441	—	914	—	16,355
Truck.....	—	—	152	—	152
Illinois	219	—	420	22	661
Railroad.....	219	—	102	—	321
River.....	—	—	217	22	238
Truck.....	—	—	101	*	101
Indiana	881	416	1,456	1	2,753
Railroad.....	—	416	778	—	1,194
River.....	874	—	217	—	1,091
Truck.....	7	—	460	1	468
Iowa	61	—	141	32	234
Railroad.....	17	—	5	—	22
River.....	45	—	136	32	212
Truck.....	—	—	—	*	*
Kentucky	9,329	428	865	107	² 10,740
Railroad.....	2,222	428	49	1	2,700
River.....	2,056	—	179	—	2,235
Truck.....	5,052	—	637	106	5,795
Unknown.....	—	—	—	—	² 10
Louisiana	—	—	11	—	11
River.....	—	—	11	—	11
Maine	—	—	194	—	194
Tidewater.....	—	—	194	—	194
Maryland	349	—	—	—	349
Railroad.....	*	—	—	—	*
Tidewater.....	349	—	—	—	349

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: KENTUCKY, EASTERN (Continued)					
Massachusetts	227	-	-	16	243
Railroad.....	189	-	-	16	206
Tidewater.....	37	-	-	-	37
Michigan	5,277	901	1,096	140	7,413
Railroad.....	4,881	567	390	140	5,977
Great Lakes.....	371	334	693	-	1,398
Truck.....	25	-	13	*	38
Minnesota	5	-	74	11	89
Railroad.....	5	-	1	-	6
River.....	-	-	55	11	66
Great Lakes.....	-	-	17	-	17
Truck.....	-	-	*	-	*
Mississippi	952	-	25	-	977
Railroad.....	952	-	-	-	952
River.....	-	-	25	-	25
Missouri	125	-	45	*	170
Railroad.....	109	-	-	-	109
River.....	16	-	45	-	61
Truck.....	-	-	-	*	*
New York	1,133	609	29	47	1,818
Railroad.....	1,068	609	27	5	1,709
River.....	-	-	2	-	2
Great Lakes.....	65	-	-	-	65
Truck.....	-	-	-	43	43
North Carolina	15,716	-	1,372	91	17,179
Railroad.....	15,628	-	1,128	90	16,847
River.....	-	-	1	-	1
Truck.....	89	-	243	*	332
Ohio	7,799	288	873	116	9,074
Railroad.....	911	288	320	-	1,519
River.....	5,726	-	141	43	5,909
Great Lakes.....	835	-	38	-	872
Truck.....	327	-	374	73	774
Oklahoma	-	-	27	-	27
River.....	-	-	27	-	27
Oregon	-	-	14	-	14
Railroad.....	-	-	14	-	14
Pennsylvania	40	312	363	51	766
Railroad.....	17	46	37	42	141
River.....	-	257	254	-	511
Truck.....	23	10	71	9	114
South Carolina	11,423	-	1,627	9	13,060
Railroad.....	11,423	-	1,583	9	13,015
Truck.....	-	-	44	*	44
South Dakota	-	-	7	-	7
River.....	-	-	7	-	7
Tennessee	7,338	-	1,999	18	9,355
Railroad.....	6,303	-	1,195	12	7,510
River.....	719	-	136	-	856
Truck.....	315	-	668	6	989
Virginia	4,526	-	724	85	5,336
Railroad.....	4,501	-	711	55	5,267
Truck.....	25	-	13	30	68
West Virginia	6	33	330	1	370
Railroad.....	3	33	44	-	80
River.....	4	-	4	-	8
Truck.....	-	-	282	1	283
Wisconsin	155	-	457	128	740
Railroad.....	*	-	99	1	100
River.....	14	-	31	126	171
Great Lakes.....	141	-	327	-	469
Truck.....	-	-	-	*	*
Unknown State	-	-	-	-	1 263
Unknown.....	-	-	-	-	1 263
State Total	95,028	3,000	14,660	880	3 113,842
Railroad.....	76,254	2,399	8,432	377	87,462
River.....	9,765	257	1,882	233	12,138

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: KENTUCKY, EASTERN (Continued)					
State Total					
Great Lakes	1,411	334	1,075	—	2,821
Tidewater	1,696	—	194	—	1,890
Truck	5,902	10	3,077	270	9,259
Unknown	—	—	—	—	3 273
ORIGIN: KENTUCKY, WESTERN					
Alabama	1,816	—	—	—	1,816
River	1,816	—	—	—	1,816
Florida	2,255	—	—	—	2,255
Railroad	704	—	—	—	704
River	1,551	—	—	—	1,551
Illinois	166	—	158	—	324
Railroad	166	—	—	—	166
River	—	—	158	—	158
Indiana	270	—	—	—	270
Railroad	105	—	—	—	105
River	165	—	—	—	165
Iowa	326	—	53	125	504
River	326	—	53	125	504
Kentucky	18,862	—	31	57	18,950
Railroad	2,591	—	—	—	2,591
River	10,035	—	—	—	10,035
Truck	6,237	—	31	57	6,325
Louisiana	661	—	—	—	661
River	661	—	—	—	661
Maine	—	—	55	—	55
Tidewater	—	—	55	—	55
Michigan	—	—	14	—	14
Railroad	—	—	14	—	14
Minnesota	4	—	—	—	4
River	4	—	—	—	4
Mississippi	3	—	—	—	3
River	3	—	—	—	3
Missouri	211	—	—	—	211
River	211	—	—	—	211
New Jersey	—	—	26	—	26
Truck	—	—	26	—	26
Tennessee	5,907	—	94	—	6,000
Railroad	2,559	—	—	—	2,559
River	1,204	—	88	—	1,292
Truck	2,144	—	6	—	2,150
Virginia	1,064	—	—	*	1,064
Railroad	1,064	—	—	—	1,064
Truck	—	—	—	*	*
Wisconsin	—	—	164	—	164
Railroad	—	—	162	—	162
River	—	—	1	—	1
Unknown State	—	—	—	—	1 7
Unknown	—	—	—	—	1 7
State Total	31,546	—	595	182	¹ 32,329
Railroad	7,188	—	176	—	7,364
River	15,977	—	301	125	16,403
Tidewater	—	—	55	—	55
Truck	8,381	—	63	57	8,501
Unknown	—	—	—	—	1 7
ORIGIN: LOUISIANA					
Louisiana	3,331	—	—	—	3,331
Truck	989	—	—	—	989
Tramway, Conveyor, and Slurry Pipeline	2,342	—	—	—	2,342
State Total	3,331	—	—	—	3,331
Truck	989	—	—	—	989

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: LOUISIANA (Continued)					
State Total					
Tramway, Conveyor, and Slurry Pipeline	2,342	-	-	-	2,342
ORIGIN: MARYLAND					
Delaware	96	-	-	-	96
Railroad	96	-	-	-	96
Maryland	698	-	209	2	909
Railroad	574	-	-	-	574
Truck	124	-	209	2	335
Pennsylvania	16	-	-	-	16
Truck	16	-	-	-	16
Virginia	38	-	2	-	40
Truck	38	-	2	-	40
West Virginia	2,977	-	1	-	2,978
Truck	2,977	-	1	-	2,978
Unknown State	-	-	-	-	19
Unknown	-	-	-	-	19
State Total	3,825	-	212	2	4,058
Railroad	670	-	-	-	670
Truck	3,155	-	212	2	3,368
Unknown	-	-	-	-	19
ORIGIN: MISSOURI					
Arkansas	-	-	15	-	15
Railroad	-	-	15	-	15
Kansas	-	-	1	-	1
Truck	-	-	1	-	1
Missouri	225	-	55	*	281
Truck	225	-	55	*	281
State Total	225	-	71	*	296
Railroad	-	-	15	-	15
Truck	225	-	56	*	281
ORIGIN: MONTANA					
Arizona	94	-	-	-	94
Railroad	94	-	-	-	94
Illinois	1,679	-	-	-	1,679
Railroad	1,679	-	-	-	1,679
Indiana	126	-	-	-	126
Railroad	126	-	-	-	126
Iowa	136	-	-	-	136
Railroad	136	-	-	-	136
Kansas	379	-	-	-	379
Railroad	379	-	-	-	379
Michigan	9,610	-	251	-	9,861
Railroad	3,439	-	-	-	3,439
Great Lakes	6,171	-	-	-	6,171
Truck	-	-	251	-	251
Minnesota	9,960	-	514	3	10,477
Railroad	9,931	-	343	3	10,276
Great Lakes	-	-	171	-	171
Truck	30	-	-	-	30
Mississippi	2,833	-	-	-	2,833
Railroad	2,833	-	-	-	2,833
Montana	10,192	-	164	4	10,360
Truck	345	-	1	4	349
Tramway, Conveyor, and Slurry Pipeline	9,848	-	163	-	10,011
Nebraska	-	-	81	-	81
Railroad	-	-	81	-	81
North Dakota	172	-	288	57	517
Railroad	172	-	288	57	517

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: MONTANA (Continued)					
South Dakota	1,698	-	-	-	1,698
Railroad	1,698	-	-	-	1,698
Washington	1,503	-	-	-	1,503
Railroad	1,503	-	-	-	1,503
Wisconsin	2,052	-	1	-	2,053
Railroad	2,051	-	-	-	2,051
Truck	1	-	1	-	2
Wyoming	-	-	2	60	62
Railroad	-	-	2	60	62
State Total	40,435	-	1,300	124	41,860
Railroad	24,040	-	714	120	24,874
Great Lakes	6,171	-	171	-	6,343
Truck	376	-	252	4	632
Tramway, Conveyor, and Slurry Pipeline	9,848	-	163	-	10,011
ORIGIN: NEW MEXICO					
Arizona	10,562	-	576	*	11,138
Railroad	10,562	-	576	-	11,138
Truck	-	-	-	*	*
Colorado	-	-	11	-	11
Railroad	-	-	11	-	11
New Mexico	15,811	-	-	9	² 15,819
Railroad	9,062	-	-	-	9,062
Truck	-	-	-	9	9
Tramway, Conveyor, and Slurry Pipeline	6,749	-	-	-	6,749
Unknown	-	-	-	-	2 0
Oklahoma	-	-	119	-	119
Railroad	-	-	119	-	119
Texas	-	-	472	-	472
Railroad	-	-	472	-	472
Wisconsin	466	-	-	-	466
Railroad	466	-	-	-	466
State Total	26,839	-	1,178	9	² 28,026
Railroad	20,090	-	1,178	-	21,267
Truck	-	-	-	9	9
Tramway, Conveyor, and Slurry Pipeline	6,749	-	-	-	6,749
Unknown	-	-	-	-	2 0
ORIGIN: NORTH DAKOTA					
North Dakota	24,296	-	6,200	61	30,557
Railroad	425	-	-	-	425
Truck	4,202	-	-	61	4,263
Tramway, Conveyor, and Slurry Pipeline	19,669	-	6,200	-	25,869
State Total	24,296	-	6,200	61	30,557
Railroad	425	-	-	-	425
Truck	4,202	-	-	61	4,263
Tramway, Conveyor, and Slurry Pipeline	19,669	-	6,200	-	25,869
ORIGIN: OHIO					
Alabama	4	-	-	-	4
River	4	-	-	-	4
Indiana	30	-	58	5	93
Railroad	26	-	-	-	26
Truck	3	-	58	5	66
Kentucky	848	-	-	-	848
River	848	-	-	-	848
Michigan	71	-	226	4	302
Truck	71	-	226	4	302
Minnesota	-	-	-	14	14
Truck	-	-	-	14	14

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: OHIO (Continued)					
New York	5	—	3	4	12
Railroad	5	—	—	4	9
Truck	*	—	3	—	4
Ohio	21,824	—	1,170	96	23,091
Railroad	1,246	—	—	—	1,246
River	4,403	—	—	—	4,403
Truck	8,319	—	1,168	96	9,584
Tramway, Conveyor, and Slurry Pipeline	7,856	—	2	—	7,858
Pennsylvania	270	—	175	—	445
River	129	—	—	—	129
Truck	141	—	175	—	316
West Virginia	1,669	—	*	—	1,670
River	1,669	—	—	—	1,669
Truck	—	—	*	—	*
Wisconsin	—	—	*	—	*
Great Lakes	—	—	*	—	*
Unknown State	—	—	—	—	1 25
Unknown	—	—	—	—	1 25
State Total	24,721	—	1,634	123	¹ 26,503
Railroad	1,278	—	—	4	1,281
River	7,052	—	—	—	7,052
Great Lakes	—	—	*	—	*
Truck	8,535	—	1,631	119	10,285
Tramway, Conveyor, and Slurry Pipeline	7,856	—	2	—	7,858
Unknown	—	—	—	—	1 25
ORIGIN: OKLAHOMA					
Arkansas	—	—	71	—	71
Railroad	—	—	31	—	31
Truck	—	—	40	—	40
Kansas	65	—	87	—	153
Truck	65	—	87	—	153
Oklahoma	1,234	—	176	1	1,411
Truck	1,234	—	176	1	1,411
Texas	—	—	88	—	88
Railroad	—	—	88	—	88
Unknown State	—	—	—	—	1 8
Unknown	—	—	—	—	1 8
State Total	1,300	—	423	1	¹ 1,731
Railroad	—	—	119	—	119
Truck	1,300	—	304	1	1,604
Unknown	—	—	—	—	1 8
ORIGIN: PENNSYLVANIA, TOTAL					
Alabama	51	—	11	—	62
Railroad	—	—	*	—	*
River	51	—	11	—	62
Truck	—	—	*	—	*
Arizona	—	—	3	—	3
Railroad	—	—	*	—	*
Truck	—	—	3	—	3
Arkansas	—	—	2	—	2
Railroad	—	—	2	—	2
Truck	—	—	*	—	*
California	—	—	*	*	*
Railroad	—	—	*	—	*
Truck	—	—	*	*	*
Colorado	*	—	18	—	18
Railroad	—	—	18	—	18
Truck	*	—	—	—	*
Connecticut	175	—	2	6	183
Railroad	175	—	—	*	175
Truck	—	—	2	6	8

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: PENNSYLVANIA, TOTAL (Continued)					
Delaware	1,181	—	35	1	1,217
Railroad.....	1,169	—	3	—	1,172
Truck.....	12	—	7	1	19
Tramway, Conveyor, and Slurry Pipeline.....	—	—	25	—	25
District of Columbia	2	—	—	*	2
Truck.....	2	—	—	*	2
Florida	213	—	4	—	218
Railroad.....	148	—	4	—	152
River.....	65	—	—	—	65
Truck.....	—	—	*	—	*
Georgia	—	—	2	—	2
Railroad.....	—	—	2	—	2
Truck.....	—	—	*	—	*
Illinois	—	—	60	*	61
Railroad.....	—	—	9	—	9
River.....	—	—	50	—	50
Truck.....	—	—	1	*	1
Indiana	128	168	8	7	311
Railroad.....	85	168	*	—	254
River.....	36	—	—	—	36
Truck.....	6	—	8	7	21
Iowa	—	—	249	26	275
Railroad.....	—	—	35	—	35
River.....	—	—	214	26	240
Truck.....	—	—	—	*	*
Kansas	—	—	1	—	1
Railroad.....	—	—	1	—	1
Kentucky	196	—	23	*	218
Railroad.....	2	—	13	—	14
River.....	194	—	—	—	194
Truck.....	—	—	10	*	10
Louisiana	24	—	18	—	42
River.....	24	—	18	—	42
Truck.....	—	—	*	—	*
Maine	—	—	7	3	10
Railroad.....	—	—	7	*	7
Truck.....	—	—	—	3	3
Maryland	2,825	—	186	21	3,032
Railroad.....	2,698	—	—	*	2,698
Truck.....	127	—	186	21	334
Massachusetts	66	—	8	10	84
Railroad.....	66	—	—	1	66
Truck.....	—	—	8	9	17
Michigan	3,805	140	80	1	4,026
Railroad.....	3,677	—	*	—	3,677
Great Lakes.....	128	140	80	—	348
Truck.....	—	—	*	1	1
Minnesota	—	—	7	—	7
Railroad.....	—	—	7	—	7
Truck.....	—	—	*	—	*
Mississippi	—	—	*	—	*
Railroad.....	—	—	*	—	*
Missouri	—	—	*	*	*
Railroad.....	—	—	*	—	*
Truck.....	—	—	—	*	*
Nebraska	—	—	11	—	11
Railroad.....	—	—	11	—	11
Truck.....	—	—	*	—	*
New Hampshire	777	—	2	4	783
Railroad.....	762	—	*	*	762
Tidewater.....	15	—	—	—	15
Truck.....	—	—	2	4	6
New Jersey	534	—	10	5	549
Railroad.....	534	—	*	*	534
Truck.....	*	—	10	5	14
New Mexico	—	—	*	—	*
Truck.....	—	—	*	—	*

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: PENNSYLVANIA, TOTAL (Continued)					
New York	4,478	4	525	91	5,098
Railroad	3,577	—	344	2	3,923
River	—	—	45	2	46
Great Lakes	555	—	—	—	555
Truck	345	4	136	88	573
North Carolina	—	—	1	—	1
Railroad	—	—	*	—	*
Truck	—	—	1	—	1
North Dakota	—	—	*	—	*
Truck	—	—	*	—	*
Ohio	5,736	10	284	3	6,033
Railroad	2,040	—	*	—	2,041
River	3,528	9	91	—	3,627
Great Lakes	133	—	111	—	244
Truck	34	1	82	3	120
Oklahoma	—	—	*	—	*
Railroad	—	—	*	—	*
Truck	—	—	*	—	*
Oregon	—	—	15	—	15
Railroad	—	—	15	—	15
Pennsylvania	37,042	1,607	2,487	777	² 41,917
Railroad	11,267	—	100	11	11,378
River	3,829	1,607	36	12	5,484
Truck	17,093	—	2,290	754	20,137
Tramway, Conveyor, and Slurry Pipeline	4,853	—	62	—	4,915
Unknown	—	—	—	—	2 3
Rhode Island	—	—	*	2	2
Truck	—	—	*	2	2
South Carolina	—	—	54	*	54
Railroad	—	—	53	—	53
Truck	—	—	1	*	1
Tennessee	684	—	16	—	701
Railroad	—	—	*	—	*
River	684	—	5	—	689
Truck	—	—	12	—	12
Texas	*	—	7	*	7
Railroad	—	—	2	—	2
River	—	—	3	—	3
Truck	*	—	2	*	2
Utah	—	153	*	—	153
Railroad	—	153	*	—	153
Vermont	—	—	—	2	2
Truck	—	—	—	2	2
Virginia	381	—	23	1	405
Railroad	80	—	*	—	80
Truck	301	—	23	1	325
West Virginia	4,219	—	473	1	4,693
Railroad	85	—	*	—	85
River	3,348	—	410	—	3,758
Truck	135	—	43	1	179
Tramway, Conveyor, and Slurry Pipeline	651	—	20	—	671
Wisconsin	2,097	—	50	*	2,147
Railroad	881	—	5	—	886
River	9	—	—	—	9
Great Lakes	1,207	—	44	—	1,251
Truck	—	—	1	*	1
Wyoming	—	—	*	—	*
Railroad	—	—	*	—	*
Unknown State	—	—	—	—	1 271
Unknown	—	—	—	—	1 271
State Total	64,613	2,083	4,684	962	³ 72,616
Railroad	27,247	322	632	14	28,216
River	11,769	1,616	882	39	14,306
Great Lakes	2,024	140	235	—	2,399
Tidewater	15	—	—	—	15
Truck	18,054	6	2,827	908	21,795
Tramway, Conveyor, and Slurry Pipeline	5,504	—	107	—	5,611
Unknown	—	—	—	—	3 274

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: PENNSYLVANIA, ANTHRACITE					
Alabama	-	-	11	-	11
Railroad.....	-	-	*	-	*
River.....	-	-	11	-	11
Truck.....	-	-	*	-	*
Arizona	-	-	3	-	3
Railroad.....	-	-	*	-	*
Truck.....	-	-	3	-	3
Arkansas	-	-	2	-	2
Railroad.....	-	-	2	-	2
Truck.....	-	-	*	-	*
California	-	-	*	*	*
Railroad.....	-	-	*	-	*
Truck.....	-	-	*	*	*
Colorado	*	-	18	-	18
Railroad.....	-	-	18	-	18
Truck.....	*	-	-	-	*
Connecticut	-	-	2	5	7
Railroad.....	-	-	-	*	*
Truck.....	-	-	2	5	7
Delaware	-	-	7	*	7
Railroad.....	-	-	*	-	*
Truck.....	-	-	7	*	7
District of Columbia	-	-	-	*	*
Truck.....	-	-	-	*	*
Florida	-	-	4	-	4
Railroad.....	-	-	4	-	4
Truck.....	-	-	*	-	*
Georgia	-	-	2	-	2
Railroad.....	-	-	2	-	2
Truck.....	-	-	*	-	*
Illinois	-	-	10	*	11
Railroad.....	-	-	9	-	9
Truck.....	-	-	1	*	1
Indiana	-	-	8	7	15
Railroad.....	-	-	*	-	*
Truck.....	-	-	8	7	15
Iowa	-	-	35	*	35
Railroad.....	-	-	35	-	35
Truck.....	-	-	-	*	*
Kansas	-	-	1	-	1
Railroad.....	-	-	1	-	1
Kentucky	-	-	23	*	23
Railroad.....	-	-	13	-	13
Truck.....	-	-	10	*	10
Louisiana	-	-	*	-	*
Truck.....	-	-	*	-	*
Maine	-	-	-	3	3
Railroad.....	-	-	-	*	*
Truck.....	-	-	-	3	3
Maryland	-	-	*	2	2
Railroad.....	-	-	-	*	*
Truck.....	-	-	*	2	2
Massachusetts	-	-	-	10	10
Railroad.....	-	-	-	1	1
Truck.....	-	-	-	9	9
Michigan	-	-	*	1	1
Railroad.....	-	-	*	-	*
Truck.....	-	-	*	1	1
Minnesota	-	-	7	-	7
Railroad.....	-	-	7	-	7
Truck.....	-	-	*	-	*
Mississippi	-	-	*	-	*
Railroad.....	-	-	*	-	*
Missouri	-	-	*	*	*
Railroad.....	-	-	*	-	*
Truck.....	-	-	-	*	*

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: PENNSYLVANIA, ANTHRACITE (Continued)					
Nebraska	-	-	11	-	11
Railroad.....	-	-	11	-	11
Truck.....	-	-	*	-	*
New Hampshire	-	-	2	3	5
Railroad.....	-	-	*	*	*
Truck.....	-	-	2	3	5
New Jersey	*	-	10	5	14
Railroad.....	-	-	*	*	*
Truck.....	*	-	10	5	14
New Mexico	-	-	*	-	*
Truck.....	-	-	*	-	*
New York	-	-	45	47	92
Railroad.....	-	-	14	2	15
Truck.....	-	-	32	45	77
North Carolina	-	-	1	-	1
Railroad.....	-	-	*	-	*
Truck.....	-	-	1	-	1
North Dakota	-	-	*	-	*
Truck.....	-	-	*	-	*
Ohio	-	1	7	3	11
Railroad.....	-	-	*	-	*
Truck.....	-	1	7	3	11
Oklahoma	-	-	*	-	*
Railroad.....	-	-	*	-	*
Truck.....	-	-	*	-	*
Oregon	-	-	15	-	15
Railroad.....	-	-	15	-	15
Pennsylvania	2,977	-	393	607	² 3,980
Railroad.....	77	-	36	11	124
Truck.....	2,900	-	357	596	3,853
Unknown.....	-	-	-	-	2 2
Rhode Island	-	-	*	2	2
Truck.....	-	-	*	2	2
South Carolina	-	-	54	*	54
Railroad.....	-	-	53	-	53
Truck.....	-	-	1	*	1
Tennessee	-	-	16	-	16
Railroad.....	-	-	*	-	*
River.....	-	-	5	-	5
Truck.....	-	-	12	-	12
Texas	*	-	7	-	7
Railroad.....	-	-	2	-	2
River.....	-	-	3	-	3
Truck.....	*	-	2	-	2
Utah	-	-	*	-	*
Railroad.....	-	-	*	-	*
Vermont	-	-	-	2	2
Truck.....	-	-	-	2	2
Virginia	-	-	2	1	3
Railroad.....	-	-	*	-	*
Truck.....	-	-	2	1	3
West Virginia	-	-	42	1	42
Railroad.....	-	-	*	-	*
Truck.....	-	-	42	1	42
Wisconsin	-	-	6	*	6
Railroad.....	-	-	5	-	5
Truck.....	-	-	1	*	1
Wyoming	-	-	*	-	*
Railroad.....	-	-	*	-	*
Unknown State	-	-	-	-	1 19
Unknown.....	-	-	-	-	1 19
State Total	2,977	1	745	700	³ 4,445
Railroad.....	77	-	228	14	320
River.....	-	-	19	-	19
Truck.....	2,900	1	499	685	4,085
Unknown.....	-	-	-	-	3 22

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: PENNSYLVANIA, BITUMINOUS					
Alabama	51	-	-	-	51
River.....	51	-	-	-	51
Connecticut	175	-	-	1	176
Railroad.....	175	-	-	-	175
Truck.....	-	-	-	1	1
Delaware	1,181	-	28	1	1,210
Railroad.....	1,169	-	3	-	1,172
Truck.....	12	-	-	1	12
Tramway, Conveyor, and Slurry Pipeline.....	-	-	25	-	25
District of Columbia	2	-	-	-	2
Truck.....	2	-	-	-	2
Florida	213	-	-	-	213
Railroad.....	148	-	-	-	148
River.....	65	-	-	-	65
Illinois	-	-	50	-	50
River.....	-	-	50	-	50
Indiana	128	168	-	-	296
Railroad.....	85	168	-	-	254
River.....	36	-	-	-	36
Truck.....	6	-	-	-	6
Iowa	-	-	214	26	240
River.....	-	-	214	26	240
Kentucky	196	-	-	-	196
Railroad.....	2	-	-	-	2
River.....	194	-	-	-	194
Louisiana	24	-	18	-	42
River.....	24	-	18	-	42
Maine	-	-	7	-	7
Railroad.....	-	-	7	-	7
Maryland	2,825	-	186	19	3,029
Railroad.....	2,698	-	-	-	2,698
Truck.....	127	-	186	19	331
Massachusetts	66	-	8	*	74
Railroad.....	66	-	-	-	66
Truck.....	-	-	8	*	8
Michigan	3,805	140	80	-	4,025
Railroad.....	3,677	-	-	-	3,677
Great Lakes.....	128	140	80	-	348
New Hampshire	777	-	-	1	778
Railroad.....	762	-	-	-	762
Tidewater.....	15	-	-	-	15
Truck.....	-	-	-	1	1
New Jersey	534	-	-	-	534
Railroad.....	534	-	-	-	534
New York	4,478	4	479	44	5,006
Railroad.....	3,577	-	330	-	3,908
River.....	-	-	45	2	46
Great Lakes.....	555	-	-	-	555
Truck.....	345	4	104	43	496
Ohio	5,736	9	277	-	6,021
Railroad.....	2,040	-	-	-	2,040
River.....	3,528	9	91	-	3,627
Great Lakes.....	133	-	111	-	244
Truck.....	34	-	75	-	109
Pennsylvania	34,065	1,607	2,094	170	37,937
Railroad.....	11,190	-	64	-	11,254
River.....	3,829	1,607	36	12	5,484
Truck.....	14,193	-	1,932	159	16,284
Tramway, Conveyor, and Slurry Pipeline.....	4,853	-	62	-	4,915
Unknown.....	-	-	-	-	2
Tennessee	684	-	-	-	684
River.....	684	-	-	-	684
Texas	-	-	-	*	*
Truck.....	-	-	-	*	*
Utah	-	153	-	-	153
Railroad.....	-	153	-	-	153

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: PENNSYLVANIA, BITUMINOUS (Continued)					
Virginia	381	—	21	*	402
Railroad.....	80	—	—	—	80
Truck.....	301	—	21	*	322
West Virginia	4,219	—	431	*	4,651
Railroad.....	85	—	—	—	85
River.....	3,348	—	410	—	3,758
Truck.....	135	—	1	*	137
Tramway, Conveyor, and Slurry Pipeline.....	651	—	20	—	671
Wisconsin	2,097	—	44	—	2,141
Railroad.....	881	—	—	—	881
River.....	9	—	—	—	9
Great Lakes.....	1,207	—	44	—	1,251
Unknown State	—	—	—	—	¹ 252
Unknown.....	—	—	—	—	¹ 252
State Total	61,637	2,082	3,939	262	³ 68,172
Railroad.....	27,170	322	404	—	27,896
River.....	11,769	1,616	864	39	14,288
Great Lakes.....	2,024	140	235	—	2,399
Tidewater.....	15	—	—	—	15
Truck.....	15,154	4	2,328	223	17,710
Tramway, Conveyor, and Slurry Pipeline.....	5,504	—	107	—	5,611
Unknown.....	—	—	—	—	³ 253
ORIGIN: TENNESSEE					
Alabama	—	—	5	—	5
Railroad.....	—	—	5	—	5
Florida	209	—	—	—	209
Railroad.....	209	—	—	—	209
Georgia	312	—	381	—	693
Railroad.....	312	—	358	—	670
Truck.....	—	—	23	—	23
Kentucky	—	—	—	7	7
Truck.....	—	—	—	7	7
North Carolina	—	—	22	*	22
Railroad.....	—	—	22	—	22
Truck.....	—	—	—	*	*
South Carolina	381	—	—	—	381
Railroad.....	381	—	—	—	381
Tennessee	1,160	—	261	1	1,422
Railroad.....	377	—	157	—	534
River.....	—	—	3	—	3
Truck.....	783	—	101	1	885
Unknown State	—	—	—	—	¹ 1
Unknown.....	—	—	—	—	¹ 1
State Total	2,062	—	669	8	¹ 2,741
Railroad.....	1,279	—	542	—	1,821
River.....	—	—	3	—	3
Truck.....	783	—	124	8	915
Unknown.....	—	—	—	—	¹ 1
ORIGIN: TEXAS					
Louisiana	144	—	—	—	144
Truck.....	144	—	—	—	144
Texas	49,834	—	2,935	—	52,769
Railroad.....	23,300	—	42	—	23,342
Truck.....	13,916	—	424	—	14,340
Tramway, Conveyor, and Slurry Pipeline.....	12,618	—	2,469	—	15,087
State Total	49,978	—	2,935	—	52,913
Railroad.....	23,300	—	42	—	23,342
Truck.....	14,060	—	424	—	14,484
Tramway, Conveyor, and Slurry Pipeline.....	12,618	—	2,469	—	15,087

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: UTAH					
California	2,794	—	1,802	115	4,711
Railroad.....	2,794	—	1,800	101	4,695
Truck.....	—	—	2	15	16
Colorado	—	—	—	3	3
Railroad.....	—	—	—	*	*
Truck.....	—	—	—	3	3
Hawaii	—	—	34	—	34
Tidewater.....	—	—	34	—	34
Idaho	—	—	66	55	121
Railroad.....	—	—	66	—	66
Truck.....	—	—	—	55	55
Illinois	2,266	—	—	—	2,266
Railroad.....	2,266	—	—	—	2,266
Kansas	—	—	—	*	*
Truck.....	—	—	—	*	*
Missouri	—	—	—	10	10
Railroad.....	—	—	—	10	10
Montana	—	—	3	*	3
Truck.....	—	—	3	*	3
Nevada	2,961	—	470	1	3,431
Railroad.....	2,948	—	78	—	3,026
Truck.....	—	—	392	1	393
Tramway, Conveyor, and Slurry Pipeline.....	12	—	—	—	12
Oregon	—	—	*	*	1
Truck.....	—	—	—	*	1
Pennsylvania	*	—	—	—	*
Truck.....	*	—	—	—	*
Tennessee	996	—	—	—	996
Railroad.....	343	—	—	—	343
River.....	654	—	—	—	654
Utah	11,576	3	838	113	12,531
Railroad.....	3,839	—	—	—	3,839
Truck.....	4,382	3	838	113	5,337
Tramway, Conveyor, and Slurry Pipeline.....	3,355	—	—	—	3,355
Washington	—	—	79	13	92
Railroad.....	—	—	71	12	84
Truck.....	—	—	7	1	8
Unknown State	—	—	—	—	1 30
Unknown.....	—	—	—	—	1 30
State Total	20,594	3	3,292	311	¹ 24,229
Railroad.....	12,190	—	2,015	123	14,328
River.....	654	—	—	—	654
Tidewater.....	—	—	34	—	34
Truck.....	4,383	3	1,243	188	5,817
Tramway, Conveyor, and Slurry Pipeline.....	3,367	—	—	—	3,367
Unknown.....	—	—	—	—	1 30
ORIGIN: VIRGINIA					
Alabama	—	468	389	—	857
Railroad.....	—	468	389	—	857
Delaware	146	—	—	—	146
Railroad.....	146	—	—	—	146
Florida	805	—	61	—	866
Railroad.....	805	—	61	—	866
Georgia	2,556	—	325	11	2,893
Railroad.....	2,556	—	325	11	2,893
Illinois	—	176	—	—	176
Railroad.....	—	176	—	—	176
Indiana	830	697	—	—	1,526
Railroad.....	—	664	—	—	664
River.....	830	32	—	—	862
Truck.....	—	*	—	—	*
Kentucky	*	—	2	—	3
River.....	*	—	—	—	*
Truck.....	—	—	2	—	2

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: VIRGINIA (Continued)					
Maryland	-	-	-	*	*
Truck.....	-	-	-	*	*
Massachusetts	1	-	-	-	1
Tidewater.....	1	-	-	-	1
Michigan	-	-	-	*	*
Truck.....	-	-	-	*	*
Mississippi	-	-	18	-	18
Railroad.....	-	-	18	-	18
New Jersey	700	-	*	-	700
Tidewater.....	700	-	-	-	700
Truck.....	-	-	*	-	*
New York	-	4	-	-	4
Railroad.....	-	4	-	-	4
North Carolina	294	-	415	26	735
Railroad.....	257	-	387	26	670
Truck.....	37	-	28	*	65
Ohio	577	164	119	-	861
Railroad.....	-	164	119	-	283
River.....	577	-	-	-	577
Oklahoma	-	-	19	-	19
River.....	-	-	19	-	19
Pennsylvania	*	195	8	*	204
Railroad.....	-	152	8	-	159
River.....	*	44	-	-	44
Truck.....	-	-	-	*	*
South Carolina	1,071	-	270	*	1,342
Railroad.....	1,071	-	270	-	1,341
Truck.....	-	-	*	*	1
Tennessee	1,601	-	659	*	2,260
Railroad.....	1,601	-	616	-	2,217
River.....	-	-	1	-	1
Truck.....	-	-	41	*	42
Texas	-	-	7	14	21
Railroad.....	-	-	7	14	21
Utah	-	27	-	-	27
Railroad.....	-	27	-	-	27
Virginia	5,960	942	524	24	² 7,602
Railroad.....	4,423	-	484	10	4,917
Truck.....	1,537	-	20	14	1,571
Tramway, Conveyor, and Slurry Pipeline.....	-	942	21	-	963
Unknown.....	-	-	-	-	² 152
West Virginia	22	392	-	*	415
Railroad.....	10	392	-	*	402
River.....	13	-	-	-	13
Truck.....	-	-	-	*	*
Unknown State	-	-	-	-	1 53
Unknown.....	-	-	-	-	1 53
State Total	14,565	3,065	2,818	76	³ 20,728
Railroad.....	10,869	2,047	2,685	61	15,662
River.....	1,420	76	20	-	1,517
Tidewater.....	701	-	-	-	701
Truck.....	1,574	*	92	15	1,681
Tramway, Conveyor, and Slurry Pipeline.....	-	942	21	-	963
Unknown.....	-	-	-	-	³ 204
ORIGIN: WASHINGTON					
Washington	4,622	-	-	-	4,622
Tramway, Conveyor, and Slurry Pipeline.....	4,622	-	-	-	4,622
State Total	4,622	-	-	-	4,622
Tramway, Conveyor, and Slurry Pipeline.....	4,622	-	-	-	4,622
ORIGIN: WEST VIRGINIA, TOTAL					
Alabama	1,117	1,263	283	-	2,664
Railroad.....	295	1,263	190	-	1,748

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: WEST VIRGINIA, TOTAL (Continued)					
Alabama					
River.....	822	-	93	-	915
Truck.....	*	-	-	-	*
Connecticut.....	742	-	-	*	743
Tidewater.....	742	-	-	-	742
Truck.....	*	-	-	*	1
Delaware.....	820	-	63	6	889
Railroad.....	820	-	63	-	883
Truck.....	-	-	-	6	6
District of Columbia.....	-	-	-	6	6
Railroad.....	-	-	-	3	3
River.....	-	-	-	3	3
Florida.....	2,233	-	-	-	2,233
Railroad.....	867	-	-	-	867
River.....	119	-	-	-	119
Tidewater.....	1,171	-	-	-	1,171
Truck.....	77	-	-	-	77
Georgia.....	4,782	-	-	-	4,782
Railroad.....	4,767	-	-	-	4,767
Truck.....	15	-	-	-	15
Idaho.....	20	-	-	-	20
Railroad.....	20	-	-	-	20
Illinois.....	43	1,522	276	-	1,841
Railroad.....	43	826	90	-	960
River.....	-	378	186	-	565
Great Lakes.....	-	317	-	-	317
Indiana.....	871	5,272	201	24	6,368
Railroad.....	454	4,790	174	24	5,441
River.....	392	482	27	-	901
Truck.....	26	-	-	-	26
Iowa.....	19	-	54	87	160
Railroad.....	-	-	25	-	25
River.....	19	-	29	87	135
Truck.....	-	-	-	*	*
Kentucky.....	6,430	1,113	597	58	8,197
Railroad.....	1,028	1,113	42	9	2,192
River.....	5,380	-	449	6	5,835
Truck.....	22	-	105	43	170
Louisiana.....	128	-	-	-	128
River.....	128	-	-	-	128
Maryland.....	6,562	-	290	30	6,881
Railroad.....	4,824	-	185	-	5,008
Tidewater.....	972	-	-	-	972
Truck.....	766	-	105	30	901
Massachusetts.....	2,222	-	248	-	2,470
Railroad.....	578	-	247	-	825
River.....	6	-	-	-	6
Tidewater.....	1,639	-	-	-	1,639
Truck.....	-	-	1	-	1
Michigan.....	4,630	839	384	-	5,854
Railroad.....	4,519	-	154	-	4,673
River.....	-	-	3	-	3
Great Lakes.....	111	839	227	-	1,177
Minnesota.....	-	-	104	12	116
River.....	-	-	104	12	116
Mississippi.....	-	-	38	-	38
Railroad.....	-	-	22	-	22
River.....	-	-	17	-	17
Missouri.....	34	-	23	-	57
River.....	34	-	23	-	57
Nebraska.....	5	-	-	-	5
Railroad.....	5	-	-	-	5
Nevada.....	-	-	36	-	36
River.....	-	-	36	-	36
New Hampshire.....	216	-	-	-	216
Railroad.....	216	-	-	-	216

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: WEST VIRGINIA, TOTAL (Continued)					
New Jersey	1,677	-	-	-	1,677
Railroad.....	980	-	-	-	980
River.....	95	-	-	-	95
Tidewater.....	602	-	-	-	602
New York	4,200	660	630	5	5,495
Railroad.....	3,821	660	395	-	4,876
River.....	-	-	234	5	239
Great Lakes.....	50	-	-	-	50
Tidewater.....	330	-	-	-	330
Truck.....	-	-	-	1	1
North Carolina	9,507	-	189	84	9,780
Railroad.....	9,329	-	184	84	9,597
Tidewater.....	178	-	-	-	178
Truck.....	-	-	5	-	5
Ohio	20,206	1,005	757	176	22,144
Railroad.....	3,032	851	188	-	4,071
River.....	17,091	-	91	170	17,352
Great Lakes.....	-	154	149	-	303
Truck.....	83	-	330	5	418
Oklahoma	-	-	121	-	121
Railroad.....	-	-	32	-	32
River.....	-	-	89	-	89
Pennsylvania	8,970	5,581	1,670	12	16,234
Railroad.....	1,709	908	880	-	3,497
River.....	6,957	4,673	694	-	12,324
Tidewater.....	12	-	-	-	12
Truck.....	285	-	97	12	394
Tramway, Conveyor, and Slurry Pipeline.....	8	-	-	-	8
South Carolina	711	-	91	13	815
Railroad.....	711	-	91	13	815
Truck.....	-	-	*	-	*
Tennessee	223	-	155	-	378
Railroad.....	7	-	1	-	8
River.....	216	-	148	-	364
Truck.....	-	-	6	-	6
Texas	1	-	-	-	1
River.....	1	-	-	-	1
Utah	-	115	10	-	125
Railroad.....	-	115	10	-	125
Vermont	-	-	*	-	*
Truck.....	-	-	*	-	*
Virginia	3,864	76	1,289	61	5,291
Railroad.....	3,188	1	1,184	47	4,419
Truck.....	676	-	106	14	796
Tramway, Conveyor, and Slurry Pipeline.....	-	75	-	-	75
West Virginia	25,679	1,265	1,343	161	² 28,451
Railroad.....	9,514	454	132	73	10,172
River.....	10,011	811	137	-	10,959
Truck.....	3,380	-	788	88	4,255
Tramway, Conveyor, and Slurry Pipeline.....	2,776	-	286	-	3,061
Unknown.....	-	-	-	-	2 3
Wisconsin	116	-	304	-	420
Railroad.....	*	-	10	-	10
River.....	-	-	1	-	1
Great Lakes.....	116	-	293	-	409
Unknown State	-	-	-	-	1 446
Unknown.....	-	-	-	-	1 446
State Total	106,029	18,712	9,157	736	³ 135,082
Railroad.....	50,727	10,980	4,299	252	66,259
River.....	41,268	6,345	2,361	283	50,258
Great Lakes.....	277	1,311	668	-	2,256
Tidewater.....	5,645	-	-	-	5,645
Truck.....	5,328	-	1,542	200	7,071
Tramway, Conveyor, and Slurry Pipeline.....	2,783	75	286	-	3,145
Unknown.....	-	-	-	-	3 448

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: WEST VIRGINIA, NORTHERN					
Alabama	396	-	-	-	396
River.....	396	-	-	-	396
Connecticut	667	-	-	-	667
Tidewater.....	666	-	-	-	666
Truck.....	*	-	-	-	*
Delaware	444	-	63	6	513
Railroad.....	444	-	63	-	507
Truck.....	-	-	-	6	6
Florida	664	-	-	-	664
Railroad.....	631	-	-	-	631
Truck.....	33	-	-	-	33
Illinois	-	-	88	-	88
River.....	-	-	88	-	88
Indiana	485	-	-	-	485
Railroad.....	454	-	-	-	454
River.....	6	-	-	-	6
Truck.....	26	-	-	-	26
Kentucky	1,206	-	-	-	1,206
Railroad.....	7	-	-	-	7
River.....	1,199	-	-	-	1,199
Louisiana	101	-	-	-	101
River.....	101	-	-	-	101
Maryland	3,845	-	271	30	4,146
Railroad.....	3,079	-	166	-	3,245
Truck.....	766	-	105	30	901
Massachusetts	39	-	1	-	40
Railroad.....	33	-	-	-	33
River.....	6	-	-	-	6
Truck.....	-	-	1	-	1
Michigan	615	-	89	-	704
Railroad.....	615	-	17	-	632
Great Lakes.....	-	-	72	-	72
Missouri	34	-	-	-	34
River.....	34	-	-	-	34
New Hampshire	208	-	-	-	208
Railroad.....	208	-	-	-	208
New Jersey	1,463	-	-	-	1,463
Railroad.....	940	-	-	-	940
River.....	70	-	-	-	70
Tidewater.....	454	-	-	-	454
New York	3,632	-	386	1	4,018
Railroad.....	3,631	-	386	-	4,017
Great Lakes.....	1	-	-	-	1
Truck.....	-	-	-	1	1
Ohio	4,630	-	-	-	4,630
Railroad.....	2,139	-	-	-	2,139
River.....	2,481	-	-	-	2,481
Truck.....	9	-	-	-	9
Pennsylvania	8,570	-	342	6	8,918
Railroad.....	1,679	-	250	-	1,929
River.....	6,845	-	-	-	6,845
Truck.....	46	-	92	6	144
Texas	1	-	-	-	1
River.....	1	-	-	-	1
Virginia	738	-	*	-	738
Railroad.....	62	-	-	-	62
Truck.....	676	-	*	-	677
West Virginia	10,646	-	255	20	10,921
Railroad.....	349	-	23	-	372
River.....	4,586	-	51	-	4,637
Truck.....	2,936	-	95	20	3,050
Tramway, Conveyor, and Slurry Pipeline.....	2,776	-	86	-	2,862
Wisconsin	91	-	269	-	360
Great Lakes.....	91	-	269	-	360
Unknown State	-	-	-	-	1 110
Unknown.....	-	-	-	-	1 110

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: WEST VIRGINIA, NORTHERN (Continued)					
State Total	38,475	—	1,764	62	¹ 40,410
Railroad.....	14,271	—	905	—	15,175
River.....	15,725	—	139	—	15,863
Great Lakes.....	92	—	341	—	433
Tidewater.....	1,120	—	—	—	1,120
Truck.....	4,492	—	293	62	4,847
Tramway, Conveyor, and Slurry Pipeline.....	2,776	—	86	—	2,862
Unknown.....	—	—	—	—	¹ 110
ORIGIN: WEST VIRGINIA, SOUTHERN					
Alabama	721	1,263	283	—	2,268
Railroad.....	295	1,263	190	—	1,748
River.....	426	—	93	—	519
Truck.....	*	—	—	—	*
Connecticut	76	—	—	*	76
Tidewater.....	76	—	—	—	76
Truck.....	—	—	—	*	*
Delaware	376	—	—	—	376
Railroad.....	376	—	—	—	376
District of Columbia	—	—	—	6	6
Railroad.....	—	—	—	3	3
River.....	—	—	—	3	3
Florida	1,570	—	—	—	1,570
Railroad.....	236	—	—	—	236
River.....	119	—	—	—	119
Tidewater.....	1,171	—	—	—	1,171
Truck.....	44	—	—	—	44
Georgia	4,782	—	—	—	4,782
Railroad.....	4,767	—	—	—	4,767
Truck.....	15	—	—	—	15
Idaho	20	—	—	—	20
Railroad.....	20	—	—	—	20
Illinois	43	1,522	189	—	1,753
Railroad.....	43	826	90	—	960
River.....	—	378	98	—	477
Great Lakes.....	—	317	—	—	317
Indiana	386	5,272	201	24	5,882
Railroad.....	—	4,790	174	24	4,987
River.....	386	482	27	—	895
Iowa	19	—	54	87	160
Railroad.....	—	—	25	—	25
River.....	19	—	29	87	135
Truck.....	—	—	—	*	*
Kentucky	5,224	1,113	597	58	6,991
Railroad.....	1,021	1,113	42	9	2,185
River.....	4,181	—	449	6	4,636
Truck.....	22	—	105	43	170
Louisiana	27	—	—	—	27
River.....	27	—	—	—	27
Maryland	2,716	—	19	—	2,735
Railroad.....	1,745	—	19	—	1,763
Tidewater.....	972	—	—	—	972
Massachusetts	2,183	—	247	—	2,430
Railroad.....	544	—	247	—	792
Tidewater.....	1,639	—	—	—	1,639
Michigan	4,015	839	295	—	5,150
Railroad.....	3,905	—	137	—	4,041
River.....	—	—	3	—	3
Great Lakes.....	111	839	155	—	1,105
Minnesota	—	—	104	12	116
River.....	—	—	104	12	116
Mississippi	—	—	38	—	38
Railroad.....	—	—	22	—	22
River.....	—	—	17	—	17

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: WEST VIRGINIA, SOUTHERN (Continued)					
Missouri.....	-	-	23	-	23
River.....	-	-	23	-	23
Nebraska.....	5	-	-	-	5
Railroad.....	5	-	-	-	5
Nevada.....	-	-	36	-	36
River.....	-	-	36	-	36
New Hampshire.....	8	-	-	-	8
Railroad.....	8	-	-	-	8
New Jersey.....	214	-	-	-	214
Railroad.....	40	-	-	-	40
River.....	25	-	-	-	25
Tidewater.....	148	-	-	-	148
New York.....	569	660	244	5	1,477
Railroad.....	190	660	9	-	859
River.....	-	-	234	5	239
Great Lakes.....	49	-	-	-	49
Tidewater.....	330	-	-	-	330
North Carolina.....	9,507	-	189	84	9,780
Railroad.....	9,329	-	184	84	9,597
Tidewater.....	178	-	-	-	178
Truck.....	-	-	5	-	5
Ohio.....	15,576	1,005	757	176	17,514
Railroad.....	892	851	188	-	1,931
River.....	14,610	-	91	170	14,871
Great Lakes.....	-	154	149	-	303
Truck.....	73	-	330	5	409
Oklahoma.....	-	-	121	-	121
Railroad.....	-	-	32	-	32
River.....	-	-	89	-	89
Pennsylvania.....	400	5,581	1,328	6	7,315
Railroad.....	30	908	630	-	1,568
River.....	111	4,673	694	-	5,478
Tidewater.....	12	-	-	-	12
Truck.....	239	-	4	6	249
Tramway, Conveyor, and Slurry Pipeline.....	8	-	-	-	8
South Carolina.....	711	-	91	13	815
Railroad.....	711	-	91	13	815
Truck.....	-	-	*	-	*
Tennessee.....	223	-	155	-	378
Railroad.....	7	-	1	-	8
River.....	216	-	148	-	364
Truck.....	-	-	6	-	6
Utah.....	-	115	10	-	125
Railroad.....	-	115	10	-	125
Vermont.....	-	-	*	-	*
Truck.....	-	-	*	-	*
Virginia.....	3,126	76	1,289	61	4,552
Railroad.....	3,126	1	1,184	47	4,357
Truck.....	*	-	105	14	120
Tramway, Conveyor, and Slurry Pipeline.....	-	75	-	-	75
West Virginia.....	15,033	1,265	1,088	141	17,529
Railroad.....	9,165	454	109	73	9,800
River.....	5,424	811	86	-	6,322
Truck.....	444	-	693	68	1,205
Tramway, Conveyor, and Slurry Pipeline.....	-	-	199	-	199
Unknown.....	-	-	-	-	2 3
Wisconsin.....	25	-	35	-	60
Railroad.....	*	-	10	-	10
River.....	-	-	1	-	1
Great Lakes.....	25	-	24	-	49
Unknown State.....	-	-	-	-	1 336
Unknown.....	-	-	-	-	1 336
State Total.....	67,554	18,712	7,393	673	3 94,671
Railroad.....	36,456	10,980	3,395	252	51,083
River.....	25,544	6,345	2,223	283	34,395
Great Lakes.....	185	1,311	327	-	1,824
Tidewater.....	4,525	-	-	-	4,525

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: WEST VIRGINIA, SOUTHERN (Continued)					
State Total					
Truck	836	-	1,249	138	2,223
Tramway, Conveyor, and Slurry Pipeline	8	75	199	-	283
Unknown	-	-	-	-	3 339
ORIGIN: WYOMING					
Alabama	6,017	-	-	-	6,017
Railroad	6,017	-	-	-	6,017
Arizona	368	-	-	-	368
Railroad	368	-	-	-	368
Arkansas	13,351	-	2	-	13,353
Railroad	13,351	-	2	-	13,353
Colorado	8,022	-	110	-	8,132
Railroad	8,022	-	49	-	8,071
Truck	-	-	61	-	61
Connecticut	33	-	-	-	33
Railroad	33	-	-	-	33
Florida	1,064	-	-	-	1,064
Railroad	1,064	-	-	-	1,064
Georgia	5,950	-	-	-	5,950
Railroad	5,950	-	-	-	5,950
Idaho	-	-	389	2	392
Railroad	-	-	360	-	360
Truck	-	-	29	2	31
Illinois	20,866	-	-	-	20,866
Railroad	13,656	-	-	-	13,656
River	7,210	-	-	-	7,210
Indiana	17,282	-	-	-	17,282
Railroad	8,010	-	-	-	8,010
River	9,206	-	-	-	9,206
Great Lakes	66	-	-	-	66
Iowa	19,904	-	786	-	20,690
Railroad	19,904	-	786	-	20,690
Kansas	14,373	-	-	-	14,373
Railroad	14,373	-	-	-	14,373
Louisiana	10,346	-	-	-	10,346
Railroad	10,346	-	-	-	10,346
Michigan	11,936	-	-	-	11,936
Railroad	11,936	-	-	-	11,936
Minnesota	7,950	-	617	2	8,568
Railroad	7,422	-	202	2	7,626
Great Lakes	490	-	415	-	904
Truck	38	-	-	-	38
Mississippi	468	-	-	-	468
Tidewater	468	-	-	-	468
Missouri	38,358	-	-	-	38,358
Railroad	38,358	-	-	-	38,358
Montana	396	-	61	*	457
Railroad	396	-	61	-	456
Truck	-	-	-	*	*
Nebraska	11,537	-	124	*	11,661
Railroad	11,537	-	124	-	11,661
Truck	-	-	-	*	*
North Dakota	65	-	-	-	65
Railroad	65	-	-	-	65
Ohio	2,435	-	-	-	2,435
Railroad	2,414	-	-	-	2,414
River	21	-	-	-	21
Oklahoma	19,254	-	4	-	19,258
Railroad	19,254	-	4	-	19,258
Oregon	2,004	-	58	-	2,062
Railroad	2,004	-	58	-	2,062
South Dakota	151	-	278	*	430
Truck	151	-	278	*	430

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: WYOMING (Continued)					
Tennessee	3,615	—	135	—	3,750
Railroad.....	3,615	—	135	—	3,750
Texas	44,893	—	196	—	45,089
Railroad.....	44,893	—	196	—	45,089
Utah	—	—	—	*	*
Truck.....	—	—	—	*	*
Virginia	55	—	—	—	55
Railroad.....	55	—	—	—	55
Washington	—	—	—	1	1
Railroad.....	—	—	—	1	1
Wisconsin	19,570	—	386	—	19,956
Railroad.....	15,040	—	386	—	15,426
Great Lakes.....	4,530	—	—	—	4,530
Wyoming	25,624	—	1,996	99	27,719
Railroad.....	11,029	—	1,291	6	12,325
Truck.....	2,726	—	705	94	3,525
Tramway, Conveyor, and Slurry Pipeline.....	11,869	—	—	—	11,869
Unknown State	—	—	—	—	1 28
Unknown.....	—	—	—	—	1 28
State Total	305,888	—	5,142	105	¹ 311,162
Railroad.....	269,113	—	3,654	8	272,775
River.....	16,437	—	—	—	16,437
Great Lakes.....	5,086	—	415	—	5,500
Tidewater.....	468	—	—	—	468
Truck.....	2,915	—	1,074	97	4,085
Tramway, Conveyor, and Slurry Pipeline.....	11,869	—	—	—	11,869
Unknown.....	—	—	—	—	1 28
ORIGIN: U.S. TOTAL					
Alabama	26,599	2,388	2,533	9	31,530
Railroad.....	15,493	2,181	1,070	—	18,744
River.....	7,575	—	110	—	7,684
Truck.....	3,531	207	1,354	9	5,102
Alaska	440	—	—	530	970
Railroad.....	138	—	—	467	606
Truck.....	301	—	—	63	364
Arizona	19,060	—	691	*	19,751
Railroad.....	19,060	—	688	—	19,748
Truck.....	—	—	3	*	3
Arkansas	13,420	—	116	—	13,536
Railroad.....	13,420	—	61	—	13,481
Truck.....	—	—	55	—	55
California	2,794	—	1,880	115	4,789
Railroad.....	2,794	—	1,878	101	4,773
Truck.....	—	—	2	15	16
Colorado	19,457	—	681	18	² 20,158
Railroad.....	15,042	—	431	*	15,473
Truck.....	4,416	—	250	18	4,683
Unknown.....	—	—	—	—	2 2
Connecticut	1,410	—	2	6	1,418
Railroad.....	248	—	—	*	248
Tidewater.....	1,162	—	—	—	1,162
Truck.....	*	—	2	6	8
Delaware	2,336	—	98	7	2,440
Railroad.....	2,324	—	66	—	2,390
Truck.....	12	—	7	7	25
Tramway, Conveyor, and Slurry Pipeline.....	—	—	25	—	25
District of Columbia	2	—	—	6	8
Railroad.....	—	—	—	3	3
River.....	—	—	—	3	3
Truck.....	2	—	—	*	2
Florida	26,017	—	1,056	6	27,078
Railroad.....	16,863	—	666	6	17,534
River.....	6,978	—	390	—	7,367
Tidewater.....	2,061	—	—	—	2,061
Truck.....	116	—	*	—	116

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: U.S. TOTAL (Continued)					
Georgia	29,789	—	1,776	11	31,576
Railroad	29,774	—	1,599	11	31,385
Truck	15	—	176	—	191
Hawaii	—	—	34	—	34
Tidewater	—	—	34	—	34
Idaho	20	—	455	58	533
Railroad	20	—	426	—	447
Truck	—	—	29	58	87
Illinois	42,872	1,769	3,959	237	48,838
Railroad	30,290	1,074	1,762	—	33,127
River	8,355	378	631	51	9,415
Great Lakes	—	317	—	—	317
Truck	4,227	—	1,539	187	5,953
Tramway, Conveyor, and Slurry Pipeline	—	—	27	—	27
Indiana	54,711	6,662	4,149	371	65,893
Railroad	34,048	6,147	1,902	24	42,121
River	11,658	515	535	3	12,711
Great Lakes	66	—	—	—	66
Truck	8,201	*	1,712	344	10,257
Tramway, Conveyor, and Slurry Pipeline	739	—	—	—	739
Iowa	21,275	—	2,248	279	23,803
Railroad	20,194	—	1,416	—	21,610
River	1,082	—	651	279	2,012
Truck	—	—	181	*	181
Kansas	16,497	—	104	*	16,601
Railroad	16,081	—	1	—	16,082
Truck	416	—	103	*	520
Kentucky	39,396	1,540	1,526	232	42,704
Railroad	8,479	1,540	104	11	10,134
River	19,085	—	633	7	19,726
Truck	11,832	—	789	214	12,834
Unknown	—	—	—	—	2 10
Louisiana	15,747	—	29	—	15,776
Railroad	10,346	—	—	—	10,346
River	1,926	—	29	—	1,954
Truck	1,133	—	*	—	1,133
Tramway, Conveyor, and Slurry Pipeline	2,342	—	—	—	2,342
Maine	—	—	255	3	258
Railroad	—	—	7	*	7
Tidewater	—	—	249	—	249
Truck	—	—	—	3	3
Maryland	10,433	—	686	53	11,171
Railroad	8,096	—	185	*	8,280
Tidewater	1,320	—	—	—	1,320
Truck	1,017	—	501	53	1,571
Massachusetts	2,515	—	256	26	2,798
Railroad	832	—	247	17	1,097
River	6	—	—	—	6
Tidewater	1,677	—	—	—	1,677
Truck	—	—	9	9	18
Michigan	35,484	1,881	2,222	145	39,731
Railroad	28,453	567	558	140	29,717
River	—	—	3	—	3
Great Lakes	6,934	1,314	1,171	—	9,419
Truck	96	—	490	5	592
Minnesota	18,090	—	1,315	42	19,447
Railroad	17,512	—	553	5	18,070
River	21	—	159	23	203
Great Lakes	490	—	603	—	1,093
Truck	67	—	*	14	81
Mississippi	5,715	—	234	—	5,949
Railroad	3,786	—	40	—	3,825
River	825	—	121	—	946
Tidewater	1,104	—	—	—	1,104
Truck	—	—	73	—	73
Missouri	41,081	—	773	166	42,019
Railroad	39,952	—	*	10	39,963
River	750	—	103	—	853
Truck	378	—	669	156	1,203

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: U.S. TOTAL (Continued)					
Montana	10,594	—	227	4	10,825
Railroad.....	401	—	61	—	462
Truck.....	345	—	4	4	353
Tramway, Conveyor, and Slurry Pipeline.....	9,848	—	163	—	10,011
Nebraska	11,548	—	307	*	11,855
Railroad.....	11,548	—	307	—	11,855
Truck.....	—	—	*	*	*
Nevada	7,470	—	505	1	7,976
Railroad.....	2,968	—	78	—	3,046
River.....	—	—	36	—	36
Truck.....	—	—	392	1	393
Tramway, Conveyor, and Slurry Pipeline.....	4,501	—	—	—	4,501
New Hampshire	993	—	2	4	1,000
Railroad.....	979	—	*	*	979
Tidewater.....	15	—	—	—	15
Truck.....	—	—	2	4	6
New Jersey	2,911	—	36	5	2,952
Railroad.....	1,514	—	*	*	1,514
River.....	95	—	—	—	95
Tidewater.....	1,302	—	—	—	1,302
Truck.....	*	—	36	5	41
New Mexico	15,867	—	73	9	15,950
Railroad.....	9,062	—	—	—	9,062
Truck.....	57	—	73	9	139
Tramway, Conveyor, and Slurry Pipeline.....	6,749	—	—	—	6,749
Unknown.....	—	—	—	—	2 0
New York	9,816	1,277	1,187	147	12,427
Railroad.....	8,471	1,273	767	10	10,521
River.....	—	—	281	6	287
Great Lakes.....	670	—	—	—	670
Tidewater.....	330	—	—	—	330
Truck.....	345	4	139	131	619
North Carolina	25,518	—	1,999	200	27,717
Railroad.....	25,214	—	1,721	200	27,135
River.....	—	—	1	—	1
Tidewater.....	178	—	—	—	178
Truck.....	126	—	276	1	403
North Dakota	24,533	—	6,488	118	31,139
Railroad.....	662	—	288	57	1,007
Truck.....	4,202	—	*	61	4,263
Tramway, Conveyor, and Slurry Pipeline.....	19,669	—	6,200	—	25,869
Ohio	58,585	1,467	3,203	391	63,646
Railroad.....	9,643	1,302	628	—	11,574
River.....	31,355	9	322	213	31,899
Great Lakes.....	968	154	298	—	1,420
Truck.....	8,762	1	1,954	178	10,895
Tramway, Conveyor, and Slurry Pipeline.....	7,856	—	2	—	7,858
Oklahoma	20,489	—	468	1	20,957
Railroad.....	19,254	—	156	—	19,410
River.....	—	—	136	—	136
Truck.....	1,234	—	176	1	1,411
Oregon	2,004	—	88	*	2,092
Railroad.....	2,004	—	88	—	2,091
Truck.....	—	—	*	*	1
Pennsylvania	46,338	7,696	4,703	841	59,582
Railroad.....	12,992	1,105	1,025	53	15,175
River.....	10,914	6,581	984	12	18,492
Tidewater.....	12	—	—	—	12
Truck.....	17,558	10	2,633	776	20,978
Tramway, Conveyor, and Slurry Pipeline.....	4,861	—	62	—	4,923
Unknown.....	—	—	—	—	2 3
Rhode Island	—	—	*	2	2
Truck.....	—	—	*	2	2
South Carolina	13,586	—	2,042	23	15,651
Railroad.....	13,586	—	1,997	22	15,605
Truck.....	—	—	45	1	46

See footnotes at end of table.

Table 63. Domestic Distribution of U.S. Coal by Origin State, Consumer, Destination and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

State of Destination by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
ORIGIN: U.S. TOTAL (Continued)					
South Dakota	1,850	—	285	*	2,135
Railroad	1,698	—	—	—	1,698
River	—	—	7	—	7
Truck	151	—	278	*	430
Tennessee	26,392	—	3,319	25	29,735
Railroad	17,201	—	2,103	12	19,316
River	5,949	—	382	6	6,336
Truck	3,242	—	834	7	4,083
Texas	97,915	—	3,829	14	101,759
Railroad	71,381	—	928	14	72,323
River	1	—	3	—	4
Truck	13,916	—	429	*	14,345
Tramway, Conveyor, and Slurry Pipeline	12,618	—	2,469	—	15,087
Utah	13,373	740	848	113	15,074
Railroad	5,636	736	10	—	6,382
Truck	4,382	3	838	113	5,337
Tramway, Conveyor, and Slurry Pipeline	3,355	—	—	—	3,355
Vermont	—	—	*	2	2
Truck	—	—	*	2	2
Virginia	15,888	1,018	2,563	172	² 19,792
Railroad	13,311	1	2,378	112	15,802
Truck	2,577	—	164	60	2,801
Tramway, Conveyor, and Slurry Pipeline	—	1,017	21	—	1,038
Unknown	—	—	—	—	2 152
Washington	6,129	—	81	14	6,224
Railroad	1,507	—	74	13	1,594
Truck	—	—	7	1	8
Tramway, Conveyor, and Slurry Pipeline	4,622	—	—	—	4,622
West Virginia	34,574	1,690	2,147	162	² 38,576
Railroad	9,611	879	176	73	10,739
River	15,044	811	551	—	16,406
Truck	6,492	—	1,114	90	7,696
Tramway, Conveyor, and Slurry Pipeline	3,427	—	306	—	3,733
Unknown	—	—	—	—	2 3
Wisconsin	25,497	—	1,555	128	27,180
Railroad	18,669	—	825	1	19,495
River	832	—	34	126	992
Great Lakes	5,995	—	695	—	6,690
Truck	1	—	1	*	3
Wyoming	25,624	—	2,147	159	27,930
Railroad	11,029	—	1,293	66	12,387
Truck	2,726	—	855	94	3,674
Tramway, Conveyor, and Slurry Pipeline	11,869	—	—	—	11,869
Unknown State	—	—	—	—	¹ 1,244
Unknown	—	—	—	—	¹ 1,244
U.S. Total	942,655	28,128	65,184	4,856	³ 1,042,236
Railroad	601,587	16,806	28,562	1,427	648,382
River	122,449	8,294	6,101	729	137,573
Great Lakes	15,123	1,785	2,766	—	19,675
Tidewater	9,162	—	282	—	9,444
Truck	101,878	226	18,197	2,700	123,000
Tramway, Conveyor, and Slurry Pipeline	92,456	1,017	9,275	—	102,749
Unknown	—	—	—	—	³ 1,413

¹ Includes distribution to unknown consumers.

² Includes distribution to the transportation sector.

³ Includes distribution to both the transportation sector and unknown consumers.

* Quantity is less than 500 short tons or percent is less than .05.

Note: Total may not equal sum of components because of independent rounding.

Source: Energy Information Administration, Form EIA-6A, "Coal Distribution Report."

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: ALABAMA					
Alabama	15,791	643	1,388	9	17,831
Railroad.....	7,988	436	53	—	8,477
River.....	4,271	—	—	—	4,271
Truck.....	3,531	207	1,335	9	5,083
Colorado	427	—	—	—	427
Railroad.....	427	—	—	—	427
Illinois	809	—	—	—	809
Railroad.....	269	—	—	—	269
River.....	540	—	—	—	540
Kentucky Total	2,383	14	457	1	2,855
Railroad.....	497	14	432	—	943
River.....	1,887	—	6	—	1,893
Truck.....	—	—	18	1	19
Eastern	567	14	457	1	1,039
Railroad.....	497	14	432	—	943
River.....	70	—	6	—	77
Truck.....	—	—	18	1	19
Western	1,816	—	—	—	1,816
River.....	1,816	—	—	—	1,816
Ohio	4	—	—	—	4
River.....	4	—	—	—	4
Pennsylvania Total	51	—	11	—	62
Railroad.....	—	—	*	—	*
River.....	51	—	11	—	62
Truck.....	—	—	*	—	*
Anthracite	—	—	11	—	11
Railroad.....	—	—	*	—	*
River.....	—	—	11	—	11
Truck.....	—	—	*	—	*
Bituminous	51	—	—	—	51
River.....	51	—	—	—	51
Tennessee	—	—	5	—	5
Railroad.....	—	—	5	—	5
Virginia	—	468	389	—	857
Railroad.....	—	468	389	—	857
West Virginia Total	1,117	1,263	283	—	2,664
Railroad.....	295	1,263	190	—	1,748
River.....	822	—	93	—	915
Truck.....	*	—	—	—	*
Northern	396	—	—	—	396
River.....	396	—	—	—	396
Southern	721	1,263	283	—	2,268
Railroad.....	295	1,263	190	—	1,748
River.....	426	—	93	—	519
Truck.....	*	—	—	—	*
Wyoming	6,017	—	—	—	6,017
Railroad.....	6,017	—	—	—	6,017
State Total	26,599	2,388	2,533	9	31,530
Railroad.....	15,493	2,181	1,070	—	18,744
River.....	7,575	—	110	—	7,684
Truck.....	3,531	207	1,354	9	5,102
DESTINATION: ALASKA					
Alaska	440	—	—	530	970
Railroad.....	138	—	—	467	606
Truck.....	301	—	—	63	364
State Total	440	—	—	530	970
Railroad.....	138	—	—	467	606
Truck.....	301	—	—	63	364
DESTINATION: ARIZONA					
Arizona	7,680	—	—	—	7,680
Railroad.....	7,680	—	—	—	7,680

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: ARIZONA (Continued)					
Colorado	355	—	112	*	467
Railroad.....	355	—	112	—	467
Truck.....	—	—	—	*	*
Montana	94	—	—	—	94
Railroad.....	94	—	—	—	94
New Mexico	10,562	—	576	*	11,138
Railroad.....	10,562	—	576	—	11,138
Truck.....	—	—	—	*	*
Pennsylvania Total	—	—	3	—	3
Railroad.....	—	—	*	—	*
Truck.....	—	—	3	—	3
Anthracite	—	—	3	—	3
Railroad.....	—	—	*	—	*
Truck.....	—	—	3	—	3
Wyoming	368	—	—	—	368
Railroad.....	368	—	—	—	368
State Total	19,060	—	691	*	19,751
Railroad.....	19,060	—	688	—	19,748
Truck.....	—	—	3	*	3
DESTINATION: ARKANSAS					
Alabama	64	—	15	—	78
Railroad.....	64	—	—	—	64
Truck.....	—	—	15	—	15
Colorado	5	—	—	—	5
Railroad.....	5	—	—	—	5
Illinois	—	—	12	—	12
Railroad.....	—	—	12	—	12
Missouri	—	—	15	—	15
Railroad.....	—	—	15	—	15
Oklahoma	—	—	71	—	71
Railroad.....	—	—	31	—	31
Truck.....	—	—	40	—	40
Pennsylvania Total	—	—	2	—	2
Railroad.....	—	—	2	—	2
Truck.....	—	—	*	—	*
Anthracite	—	—	2	—	2
Railroad.....	—	—	2	—	2
Truck.....	—	—	*	—	*
Wyoming	13,351	—	2	—	13,353
Railroad.....	13,351	—	2	—	13,353
State Total	13,420	—	116	—	13,536
Railroad.....	13,420	—	61	—	13,481
Truck.....	—	—	55	—	55
DESTINATION: CALIFORNIA					
Colorado	—	—	78	—	78
Railroad.....	—	—	78	—	78
Pennsylvania Total	—	—	*	*	*
Railroad.....	—	—	*	—	*
Truck.....	—	—	*	*	*
Anthracite	—	—	*	*	*
Railroad.....	—	—	*	—	*
Truck.....	—	—	*	*	*
Utah	2,794	—	1,802	115	4,711
Railroad.....	2,794	—	1,800	101	4,695
Truck.....	—	—	2	15	16
State Total	2,794	—	1,880	115	4,789
Railroad.....	2,794	—	1,878	101	4,773
Truck.....	—	—	2	15	16

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: COLORADO					
Colorado	11,435	—	543	14	¹ 11,993
Railroad	7,019	—	354	—	7,373
Truck	4,415	—	189	14	4,618
Unknown	—	—	—	—	1 2
New Mexico	—	—	11	—	11
Railroad	—	—	11	—	11
Pennsylvania Total	*	—	18	—	18
Railroad	—	—	18	—	18
Truck	*	—	—	—	*
Anthracite	*	—	18	—	18
Railroad	—	—	18	—	18
Truck	*	—	—	—	*
Utah	—	—	—	3	3
Railroad	—	—	—	*	*
Truck	—	—	—	3	3
Wyoming	8,022	—	110	—	8,132
Railroad	8,022	—	49	—	8,071
Truck	—	—	61	—	61
State Total	19,457	—	681	18	¹ 20,158
Railroad	15,042	—	431	*	15,473
Truck	4,416	—	250	18	4,683
Unknown	—	—	—	—	1 2
DESTINATION: CONNECTICUT					
Kentucky Total	460	—	—	—	460
Railroad	40	—	—	—	40
Tidewater	420	—	—	—	420
Eastern	460	—	—	—	460
Railroad	40	—	—	—	40
Tidewater	420	—	—	—	420
Pennsylvania Total	175	—	2	6	183
Railroad	175	—	—	*	175
Truck	—	—	2	6	8
Anthracite	—	—	2	5	7
Railroad	—	—	—	*	*
Truck	—	—	2	5	7
Bituminous	175	—	—	1	176
Railroad	175	—	—	—	175
Truck	—	—	—	1	1
West Virginia Total	742	—	—	*	743
Tidewater	742	—	—	—	742
Truck	*	—	—	*	1
Northern	667	—	—	—	667
Tidewater	666	—	—	—	666
Truck	*	—	—	—	*
Southern	76	—	—	*	76
Tidewater	76	—	—	—	76
Truck	—	—	—	*	*
Wyoming	33	—	—	—	33
Railroad	33	—	—	—	33
State Total	1,410	—	2	6	1,418
Railroad	248	—	—	*	248
Tidewater	1,162	—	—	—	1,162
Truck	*	—	2	6	8
DESTINATION: DELAWARE					
Kentucky Total	92	—	—	—	92
Railroad	92	—	—	—	92
Eastern	92	—	—	—	92
Railroad	92	—	—	—	92
Maryland	96	—	—	—	96
Railroad	96	—	—	—	96

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: DELAWARE (Continued)					
Pennsylvania Total	1,181	—	35	1	1,217
Railroad.....	1,169	—	3	—	1,172
Truck.....	12	—	7	1	19
Tramway, Conveyor, and Slurry Pipeline.....	—	—	25	—	25
Anthracite	—	—	7	*	7
Railroad.....	—	—	*	—	*
Truck.....	—	—	7	*	7
Bituminous	1,181	—	28	1	1,210
Railroad.....	1,169	—	3	—	1,172
Truck.....	12	—	—	1	12
Tramway, Conveyor, and Slurry Pipeline.....	—	—	25	—	25
Virginia	146	—	—	—	146
Railroad.....	146	—	—	—	146
West Virginia Total	820	—	63	6	889
Railroad.....	820	—	63	—	883
Truck.....	—	—	—	6	6
Northern	444	—	63	6	513
Railroad.....	444	—	63	—	507
Truck.....	—	—	—	6	6
Southern	376	—	—	—	376
Railroad.....	376	—	—	—	376
State Total	2,336	—	98	7	2,440
Railroad.....	2,324	—	66	—	2,390
Truck.....	12	—	7	7	25
Tramway, Conveyor, and Slurry Pipeline.....	—	—	25	—	25
DESTINATION: DISTRICT OF COLUMBIA					
Pennsylvania Total	2	—	—	*	2
Truck.....	2	—	—	*	2
Anthracite	—	—	—	*	*
Truck.....	—	—	—	*	*
Bituminous	2	—	—	—	2
Truck.....	2	—	—	—	2
West Virginia Total	—	—	—	6	6
Railroad.....	—	—	—	3	3
River.....	—	—	—	3	3
Southern	—	—	—	6	6
Railroad.....	—	—	—	3	3
River.....	—	—	—	3	3
State Total	2	—	—	6	8
Railroad.....	—	—	—	3	3
River.....	—	—	—	3	3
Truck.....	2	—	—	*	2
DESTINATION: FLORIDA					
Alabama	24	—	—	—	24
River.....	24	—	—	—	24
Illinois	6,265	—	—	—	6,265
Railroad.....	1,330	—	—	—	1,330
River.....	4,935	—	—	—	4,935
Indiana	41	—	—	—	41
River.....	41	—	—	—	41
Kentucky Total	15,162	—	990	6	16,157
Railroad.....	12,439	—	601	6	13,046
River.....	1,793	—	390	—	2,183
Tidewater.....	890	—	—	—	890
Truck.....	39	—	—	—	39
Eastern	12,907	—	990	6	13,902
Railroad.....	11,736	—	601	6	12,342
River.....	242	—	390	—	631
Tidewater.....	890	—	—	—	890
Truck.....	39	—	—	—	39

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: FLORIDA (Continued)					
Western	2,255	-	-	-	2,255
Railroad.....	704	-	-	-	704
River.....	1,551	-	-	-	1,551
Pennsylvania Total	213	-	4	-	218
Railroad.....	148	-	4	-	152
River.....	65	-	-	-	65
Truck.....	-	-	*	-	*
Anthracite	-	-	4	-	4
Railroad.....	-	-	4	-	4
Truck.....	-	-	*	-	*
Bituminous	213	-	-	-	213
Railroad.....	148	-	-	-	148
River.....	65	-	-	-	65
Tennessee	209	-	-	-	209
Railroad.....	209	-	-	-	209
Virginia	805	-	61	-	866
Railroad.....	805	-	61	-	866
West Virginia Total	2,233	-	-	-	2,233
Railroad.....	867	-	-	-	867
River.....	119	-	-	-	119
Tidewater.....	1,171	-	-	-	1,171
Truck.....	77	-	-	-	77
Northern	664	-	-	-	664
Railroad.....	631	-	-	-	631
Truck.....	33	-	-	-	33
Southern	1,570	-	-	-	1,570
Railroad.....	236	-	-	-	236
River.....	119	-	-	-	119
Tidewater.....	1,171	-	-	-	1,171
Truck.....	44	-	-	-	44
Wyoming	1,064	-	-	-	1,064
Railroad.....	1,064	-	-	-	1,064
State Total	26,017	-	1,056	6	27,078
Railroad.....	16,863	-	666	6	17,534
River.....	6,978	-	390	-	7,367
Tidewater.....	2,061	-	-	-	2,061
Truck.....	116	-	*	-	116
DESTINATION: GEORGIA					
Alabama	72	-	2	-	74
Railroad.....	72	-	-	-	72
Truck.....	-	-	2	-	2
Illinois	676	-	-	-	676
Railroad.....	676	-	-	-	676
Kentucky Total	15,441	-	1,066	-	16,507
Railroad.....	15,441	-	914	-	16,355
Truck.....	-	-	152	-	152
Eastern	15,441	-	1,066	-	16,507
Railroad.....	15,441	-	914	-	16,355
Truck.....	-	-	152	-	152
Pennsylvania Total	-	-	2	-	2
Railroad.....	-	-	2	-	2
Truck.....	-	-	*	-	*
Anthracite	-	-	2	-	2
Railroad.....	-	-	2	-	2
Truck.....	-	-	*	-	*
Tennessee	312	-	381	-	693
Railroad.....	312	-	358	-	670
Truck.....	-	-	23	-	23
Virginia	2,556	-	325	11	2,893
Railroad.....	2,556	-	325	11	2,893
West Virginia Total	4,782	-	-	-	4,782
Railroad.....	4,767	-	-	-	4,767
Truck.....	15	-	-	-	15

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: GEORGIA (Continued)					
Southern	4,782	-	-	-	4,782
Railroad	4,767	-	-	-	4,767
Truck	15	-	-	-	15
Wyoming	5,950	-	-	-	5,950
Railroad	5,950	-	-	-	5,950
State Total	29,789	-	1,776	11	31,576
Railroad	29,774	-	1,599	11	31,385
Truck	15	-	176	-	191
DESTINATION: HAWAII					
Utah	-	-	34	-	34
Tidewater	-	-	34	-	34
State Total	-	-	34	-	34
Tidewater	-	-	34	-	34
DESTINATION: IDAHO					
Utah	-	-	66	55	121
Railroad	-	-	66	-	66
Truck	-	-	-	55	55
West Virginia Total	20	-	-	-	20
Railroad	20	-	-	-	20
Southern	20	-	-	-	20
Railroad	20	-	-	-	20
Wyoming	-	-	389	2	392
Railroad	-	-	360	-	360
Truck	-	-	29	2	31
State Total	20	-	455	58	533
Railroad	20	-	426	-	447
Truck	-	-	29	58	87
DESTINATION: ILLINOIS					
Alabama	-	71	-	-	71
Railroad	-	71	-	-	71
Colorado	2,234	-	199	-	2,433
Railroad	1,610	-	197	-	1,807
River	625	-	1	-	626
Illinois	13,763	-	2,675	215	16,652
Railroad	9,054	-	1,220	-	10,274
River	520	-	19	29	568
Truck	4,188	-	1,410	186	5,784
Tramway, Conveyor, and Slurry Pipeline	-	-	27	-	27
Indiana	1,636	-	171	*	1,807
Railroad	1,597	-	144	-	1,741
Truck	39	-	27	*	67
Kentucky Total	385	-	578	22	985
Railroad	385	-	102	-	487
River	-	-	375	22	397
Truck	-	-	101	*	101
Eastern	219	-	420	22	661
Railroad	219	-	102	-	321
River	-	-	217	22	238
Truck	-	-	101	*	101
Western	166	-	158	-	324
Railroad	166	-	-	-	166
River	-	-	158	-	158
Montana	1,679	-	-	-	1,679
Railroad	1,679	-	-	-	1,679
Pennsylvania Total	-	-	60	*	61
Railroad	-	-	9	-	9
River	-	-	50	-	50
Truck	-	-	1	*	1

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: ILLINOIS (Continued)					
Anthracite	-	-	10	*	11
Railroad.....	-	-	9	-	9
Truck.....	-	-	1	*	1
Bituminous	-	-	50	-	50
River.....	-	-	50	-	50
Utah	2,266	-	-	-	2,266
Railroad.....	2,266	-	-	-	2,266
Virginia	-	176	-	-	176
Railroad.....	-	176	-	-	176
West Virginia Total	43	1,522	276	-	1,841
Railroad.....	43	826	90	-	960
River.....	-	378	186	-	565
Great Lakes.....	-	317	-	-	317
Northern	-	-	88	-	88
River.....	-	-	88	-	88
Southern	43	1,522	189	-	1,753
Railroad.....	43	826	90	-	960
River.....	-	378	98	-	477
Great Lakes.....	-	317	-	-	317
Wyoming	20,866	-	-	-	20,866
Railroad.....	13,656	-	-	-	13,656
River.....	7,210	-	-	-	7,210
State Total	42,872	1,769	3,959	237	48,838
Railroad.....	30,290	1,074	1,762	-	33,127
River.....	8,355	378	631	51	9,415
Great Lakes.....	-	317	-	-	317
Truck.....	4,227	-	1,539	187	5,953
Tramway, Conveyor, and Slurry Pipeline.....	-	-	27	-	27
DESTINATION: INDIANA					
Alabama	-	58	-	-	58
Railroad.....	-	58	-	-	58
Colorado	-	51	-	-	51
Railroad.....	-	51	-	-	51
Illinois	4,001	-	181	3	4,184
Railroad.....	3,791	-	-	-	3,791
River.....	38	-	8	3	49
Truck.....	172	-	173	-	344
Indiana	30,294	-	2,246	332	32,872
Railroad.....	21,450	-	949	*	22,400
River.....	117	-	283	-	400
Truck.....	7,987	-	1,014	332	9,333
Tramway, Conveyor, and Slurry Pipeline.....	739	-	-	-	739
Kentucky Total	1,151	416	1,456	1	3,023
Railroad.....	105	416	778	-	1,299
River.....	1,039	-	217	-	1,256
Truck.....	7	-	460	1	468
Eastern	881	416	1,456	1	2,753
Railroad.....	-	416	778	-	1,194
River.....	874	-	217	-	1,091
Truck.....	7	-	460	1	468
Western	270	-	-	-	270
Railroad.....	105	-	-	-	105
River.....	165	-	-	-	165
Montana	126	-	-	-	126
Railroad.....	126	-	-	-	126
Ohio	30	-	58	5	93
Railroad.....	26	-	-	-	26
Truck.....	3	-	58	5	66
Pennsylvania Total	128	168	8	7	311
Railroad.....	85	168	*	-	254
River.....	36	-	-	-	36
Truck.....	6	-	8	7	21
Anthracite	-	-	8	7	15
Railroad.....	-	-	*	-	*
Truck.....	-	-	8	7	15

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: INDIANA (Continued)					
Bituminous	128	168	—	—	296
Railroad	85	168	—	—	254
River	36	—	—	—	36
Truck	6	—	—	—	6
Virginia	830	697	—	—	1,526
Railroad	—	664	—	—	664
River	830	32	—	—	862
Truck	—	*	—	—	*
West Virginia Total	871	5,272	201	24	6,368
Railroad	454	4,790	174	24	5,441
River	392	482	27	—	901
Truck	26	—	—	—	26
Northern	485	—	—	—	485
Railroad	454	—	—	—	454
River	6	—	—	—	6
Truck	26	—	—	—	26
Southern	386	5,272	201	24	5,882
Railroad	—	4,790	174	24	4,987
River	386	482	27	—	895
Wyoming	17,282	—	—	—	17,282
Railroad	8,010	—	—	—	8,010
River	9,206	—	—	—	9,206
Great Lakes	66	—	—	—	66
State Total	54,711	6,662	4,149	371	65,893
Railroad	34,048	6,147	1,902	24	42,121
River	11,658	515	535	3	12,711
Great Lakes	66	—	—	—	66
Truck	8,201	*	1,712	344	10,257
Tramway, Conveyor, and Slurry Pipeline	739	—	—	—	739
DESTINATION: IOWA					
Colorado	471	—	124	—	595
Railroad	20	—	124	—	144
River	451	—	—	—	451
Illinois	241	—	699	10	949
Railroad	—	—	299	—	299
River	241	—	219	10	469
Truck	—	—	181	—	181
Indiana	117	—	142	—	259
Railroad	117	—	142	—	259
Kentucky Total	387	—	194	156	738
Railroad	17	—	5	—	22
River	371	—	189	156	716
Truck	—	—	—	*	*
Eastern	61	—	141	32	234
Railroad	17	—	5	—	22
River	45	—	136	32	212
Truck	—	—	—	*	*
Western	326	—	53	125	504
River	326	—	53	125	504
Montana	136	—	—	—	136
Railroad	136	—	—	—	136
Pennsylvania Total	—	—	249	26	275
Railroad	—	—	35	—	35
River	—	—	214	26	240
Truck	—	—	—	*	*
Anthracite	—	—	35	*	35
Railroad	—	—	35	—	35
Truck	—	—	—	*	*
Bituminous	—	—	214	26	240
River	—	—	214	26	240
West Virginia Total	19	—	54	87	160
Railroad	—	—	25	—	25
River	19	—	29	87	135
Truck	—	—	—	*	*

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: IOWA (Continued)					
Southern	19	—	54	87	160
Railroad	—	—	25	—	25
River	19	—	29	87	135
Truck	—	—	—	*	*
Wyoming	19,904	—	786	—	20,690
Railroad	19,904	—	786	—	20,690
State Total	21,275	—	2,248	279	23,803
Railroad	20,194	—	1,416	—	21,610
River	1,082	—	651	279	2,012
Truck	—	—	181	*	181
DESTINATION: KANSAS					
Colorado	1,289	—	—	—	1,289
Railroad	1,289	—	—	—	1,289
Illinois	41	—	—	—	41
Railroad	41	—	—	—	41
Kansas	351	—	15	—	366
Truck	351	—	15	—	366
Missouri	—	—	1	—	1
Truck	—	—	1	—	1
Montana	379	—	—	—	379
Railroad	379	—	—	—	379
Oklahoma	65	—	87	—	153
Truck	65	—	87	—	153
Pennsylvania Total	—	—	1	—	1
Railroad	—	—	1	—	1
Anthracite	—	—	1	—	1
Railroad	—	—	1	—	1
Utah	—	—	—	*	*
Truck	—	—	—	*	*
Wyoming	14,373	—	—	—	14,373
Railroad	14,373	—	—	—	14,373
State Total	16,497	—	104	*	16,601
Railroad	16,081	—	1	—	16,082
Truck	416	—	103	*	520
DESTINATION: KENTUCKY					
Colorado	1,962	—	—	—	1,962
Railroad	1,952	—	—	—	1,952
River	10	—	—	—	10
Illinois	684	—	—	2	686
Railroad	684	—	—	—	684
River	—	—	—	2	2
Truck	—	—	—	*	*
Indiana	1,084	—	8	—	1,093
River	562	—	4	—	567
Truck	522	—	4	—	526
Kentucky Total	28,192	428	896	165	29,690
Railroad	4,813	428	49	1	5,291
River	12,090	—	179	—	12,269
Truck	11,288	—	668	163	12,119
Unknown	—	—	—	—	1 10
Eastern	9,329	428	865	107	10,740
Railroad	2,222	428	49	1	2,700
River	2,056	—	179	—	2,235
Truck	5,052	—	637	106	5,795
Unknown	—	—	—	—	1 10
Western	18,862	—	31	57	18,950
Railroad	2,591	—	—	—	2,591
River	10,035	—	—	—	10,035
Truck	6,237	—	31	57	6,325
Ohio	848	—	—	—	848
River	848	—	—	—	848

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: KENTUCKY (Continued)					
Pennsylvania Total	196	—	23	*	218
Railroad.....	2	—	13	—	14
River.....	194	—	—	—	194
Truck.....	—	—	10	*	10
Anthracite	—	—	23	*	23
Railroad.....	—	—	13	—	13
Truck.....	—	—	10	*	10
Bituminous	196	—	—	—	196
Railroad.....	2	—	—	—	2
River.....	194	—	—	—	194
Tennessee	—	—	—	7	7
Truck.....	—	—	—	7	7
Virginia	*	—	2	—	3
River.....	*	—	—	—	*
Truck.....	—	—	2	—	2
West Virginia Total	6,430	1,113	597	58	8,197
Railroad.....	1,028	1,113	42	9	2,192
River.....	5,380	—	449	6	5,835
Truck.....	22	—	105	43	170
Northern	1,206	—	—	—	1,206
Railroad.....	7	—	—	—	7
River.....	1,199	—	—	—	1,199
Southern	5,224	1,113	597	58	6,991
Railroad.....	1,021	1,113	42	9	2,185
River.....	4,181	—	449	6	4,636
Truck.....	22	—	105	43	170
State Total	39,396	1,540	1,526	232	¹ 42,704
Railroad.....	8,479	1,540	104	11	10,134
River.....	19,085	—	633	7	19,726
Truck.....	11,832	—	789	214	12,834
Unknown.....	—	—	—	—	¹ 10
DESTINATION: LOUISIANA					
Illinois	1,113	—	—	—	1,113
River.....	1,113	—	—	—	1,113
Kentucky Total	661	—	11	—	672
River.....	661	—	11	—	672
Eastern	—	—	11	—	11
River.....	—	—	11	—	11
Western	661	—	—	—	661
River.....	661	—	—	—	661
Louisiana	3,331	—	—	—	3,331
Truck.....	989	—	—	—	989
Tramway, Conveyor, and Slurry Pipeline.....	2,342	—	—	—	2,342
Pennsylvania Total	24	—	18	—	42
River.....	24	—	18	—	42
Truck.....	—	—	*	—	*
Anthracite	—	—	*	—	*
Truck.....	—	—	*	—	*
Bituminous	24	—	18	—	42
River.....	24	—	18	—	42
Texas	144	—	—	—	144
Truck.....	144	—	—	—	144
West Virginia Total	128	—	—	—	128
River.....	128	—	—	—	128
Northern	101	—	—	—	101
River.....	101	—	—	—	101
Southern	27	—	—	—	27
River.....	27	—	—	—	27
Wyoming	10,346	—	—	—	10,346
Railroad.....	10,346	—	—	—	10,346
State Total	15,747	—	29	—	15,776
Railroad.....	10,346	—	—	—	10,346
River.....	1,926	—	29	—	1,954
Truck.....	1,133	—	*	—	1,133

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: LOUISIANA (Continued)					
State Total					
Tramway, Conveyor, and Slurry Pipeline	2,342	-	-	-	2,342
DESTINATION: MAINE					
Kentucky Total	-	-	249	-	249
Tidewater	-	-	249	-	249
Eastern	-	-	194	-	194
Tidewater	-	-	194	-	194
Western	-	-	55	-	55
Tidewater	-	-	55	-	55
Pennsylvania Total	-	-	7	3	10
Railroad	-	-	7	*	7
Truck	-	-	-	3	3
Anthracite	-	-	-	3	3
Railroad	-	-	-	*	*
Truck	-	-	-	3	3
Bituminous	-	-	7	-	7
Railroad	-	-	7	-	7
State Total	-	-	255	3	258
Railroad	-	-	7	*	7
Tidewater	-	-	249	-	249
Truck	-	-	-	3	3
DESTINATION: MARYLAND					
Arkansas	-	-	1	-	1
Truck	-	-	1	-	1
Kentucky Total	349	-	-	-	349
Railroad	*	-	-	-	*
Tidewater	349	-	-	-	349
Eastern	349	-	-	-	349
Railroad	*	-	-	-	*
Tidewater	349	-	-	-	349
Maryland	698	-	209	2	909
Railroad	574	-	-	-	574
Truck	124	-	209	2	335
Pennsylvania Total	2,825	-	186	21	3,032
Railroad	2,698	-	-	*	2,698
Truck	127	-	186	21	334
Anthracite	-	-	*	2	2
Railroad	-	-	-	*	*
Truck	-	-	*	2	2
Bituminous	2,825	-	186	19	3,029
Railroad	2,698	-	-	-	2,698
Truck	127	-	186	19	331
Virginia	-	-	-	*	*
Truck	-	-	-	*	*
West Virginia Total	6,562	-	290	30	6,881
Railroad	4,824	-	185	-	5,008
Tidewater	972	-	-	-	972
Truck	766	-	105	30	901
Northern	3,845	-	271	30	4,146
Railroad	3,079	-	166	-	3,245
Truck	766	-	105	30	901
Southern	2,716	-	19	-	2,735
Railroad	1,745	-	19	-	1,763
Tidewater	972	-	-	-	972
State Total	10,433	-	686	53	11,171
Railroad	8,096	-	185	*	8,280
Tidewater	1,320	-	-	-	1,320
Truck	1,017	-	501	53	1,571

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: MASSACHUSETTS					
Kentucky Total	227	—	—	16	243
Railroad	189	—	—	16	206
Tidewater	37	—	—	—	37
Eastern	227	—	—	16	243
Railroad	189	—	—	16	206
Tidewater	37	—	—	—	37
Pennsylvania Total	66	—	8	10	84
Railroad	66	—	—	1	66
Truck	—	—	8	9	17
Anthracite	—	—	—	10	10
Railroad	—	—	—	1	1
Truck	—	—	—	9	9
Bituminous	66	—	8	*	74
Railroad	66	—	—	—	66
Truck	—	—	8	*	8
Virginia	1	—	—	—	1
Tidewater	1	—	—	—	1
West Virginia Total	2,222	—	248	—	2,470
Railroad	578	—	247	—	825
River	6	—	—	—	6
Tidewater	1,639	—	—	—	1,639
Truck	—	—	1	—	1
Northern	39	—	1	—	40
Railroad	33	—	—	—	33
River	6	—	—	—	6
Truck	—	—	1	—	1
Southern	2,183	—	247	—	2,430
Railroad	544	—	247	—	792
Tidewater	1,639	—	—	—	1,639
State Total	2,515	—	256	26	2,798
Railroad	832	—	247	17	1,097
River	6	—	—	—	6
Tidewater	1,677	—	—	—	1,677
Truck	—	—	9	9	18
DESTINATION: MICHIGAN					
Colorado	33	—	143	—	176
Great Lakes	33	—	143	—	176
Indiana	120	—	28	—	148
Great Lakes	120	—	28	—	148
Kentucky Total	5,277	901	1,110	140	7,427
Railroad	4,881	567	404	140	5,991
Great Lakes	371	334	693	—	1,398
Truck	25	—	13	*	38
Eastern	5,277	901	1,096	140	7,413
Railroad	4,881	567	390	140	5,977
Great Lakes	371	334	693	—	1,398
Truck	25	—	13	*	38
Western	—	—	14	—	14
Railroad	—	—	14	—	14
Montana	9,610	—	251	—	9,861
Railroad	3,439	—	—	—	3,439
Great Lakes	6,171	—	—	—	6,171
Truck	—	—	251	—	251
Ohio	71	—	226	4	302
Truck	71	—	226	4	302
Pennsylvania Total	3,805	140	80	1	4,026
Railroad	3,677	—	*	—	3,677
Great Lakes	128	140	80	—	348
Truck	—	—	*	1	1
Anthracite	—	—	*	1	1
Railroad	—	—	*	—	*
Truck	—	—	*	1	1
Bituminous	3,805	140	80	—	4,025
Railroad	3,677	—	—	—	3,677
Great Lakes	128	140	80	—	348

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: MICHIGAN (Continued)					
Virginia	-	-	-	*	*
Truck.....	-	-	-	*	*
West Virginia Total	4,630	839	384	-	5,854
Railroad.....	4,519	-	154	-	4,673
River.....	-	-	3	-	3
Great Lakes.....	111	839	227	-	1,177
Northern	615	-	89	-	704
Railroad.....	615	-	17	-	632
Great Lakes.....	-	-	72	-	72
Southern	4,015	839	295	-	5,150
Railroad.....	3,905	-	137	-	4,041
River.....	-	-	3	-	3
Great Lakes.....	111	839	155	-	1,105
Wyoming	11,936	-	-	-	11,936
Railroad.....	11,936	-	-	-	11,936
State Total	35,484	1,881	2,222	145	39,731
Railroad.....	28,453	567	558	140	29,717
River.....	-	-	3	-	3
Great Lakes.....	6,934	1,314	1,171	-	9,419
Truck.....	96	-	490	5	592
DESTINATION: MINNESOTA					
Illinois	104	-	-	-	104
Railroad.....	87	-	-	-	87
River.....	17	-	-	-	17
Indiana	67	-	-	-	67
Railroad.....	67	-	-	-	67
Kentucky Total	9	-	74	11	93
Railroad.....	5	-	1	-	6
River.....	4	-	55	11	70
Great Lakes.....	-	-	17	-	17
Truck.....	-	-	*	-	*
Eastern	5	-	74	11	89
Railroad.....	5	-	1	-	6
River.....	-	-	55	11	66
Great Lakes.....	-	-	17	-	17
Truck.....	-	-	*	-	*
Western	4	-	-	-	4
River.....	4	-	-	-	4
Montana	9,960	-	514	3	10,477
Railroad.....	9,931	-	343	3	10,276
Great Lakes.....	-	-	171	-	171
Truck.....	30	-	-	-	30
Ohio	-	-	-	14	14
Truck.....	-	-	-	14	14
Pennsylvania Total	-	-	7	-	7
Railroad.....	-	-	7	-	7
Truck.....	-	-	*	-	*
Anthracite	-	-	7	-	7
Railroad.....	-	-	7	-	7
Truck.....	-	-	*	-	*
West Virginia Total	-	-	104	12	116
River.....	-	-	104	12	116
Southern	-	-	104	12	116
River.....	-	-	104	12	116
Wyoming	7,950	-	617	2	8,568
Railroad.....	7,422	-	202	2	7,626
Great Lakes.....	490	-	415	-	904
Truck.....	38	-	-	-	38
State Total	18,090	-	1,315	42	19,447
Railroad.....	17,512	-	553	5	18,070
River.....	21	-	159	23	203
Great Lakes.....	490	-	603	-	1,093
Truck.....	67	-	*	14	81

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: MISSISSIPPI					
Alabama	-	-	73	-	73
Truck.....	-	-	73	-	73
Illinois	1,458	-	80	-	1,538
River.....	822	-	80	-	902
Tidewater.....	636	-	-	-	636
Kentucky Total	955	-	25	-	980
Railroad.....	952	-	-	-	952
River.....	3	-	25	-	28
Eastern	952	-	25	-	977
Railroad.....	952	-	-	-	952
River.....	-	-	25	-	25
Western	3	-	-	-	3
River.....	3	-	-	-	3
Montana	2,833	-	-	-	2,833
Railroad.....	2,833	-	-	-	2,833
Pennsylvania Total	-	-	*	-	*
Railroad.....	-	-	*	-	*
Anthracite	-	-	*	-	*
Railroad.....	-	-	*	-	*
Virginia	-	-	18	-	18
Railroad.....	-	-	18	-	18
West Virginia Total	-	-	38	-	38
Railroad.....	-	-	22	-	22
River.....	-	-	17	-	17
Southern	-	-	38	-	38
Railroad.....	-	-	22	-	22
River.....	-	-	17	-	17
Wyoming	468	-	-	-	468
Tidewater.....	468	-	-	-	468
State Total	5,715	-	234	-	5,949
Railroad.....	3,786	-	40	-	3,825
River.....	825	-	121	-	946
Tidewater.....	1,104	-	-	-	1,104
Truck.....	-	-	73	-	73
DESTINATION: MISSOURI					
Arkansas	-	-	19	-	19
Truck.....	-	-	19	-	19
Colorado	14	-	-	-	14
Railroad.....	14	-	-	-	14
Illinois	1,892	-	626	156	2,674
Railroad.....	1,471	-	-	-	1,471
River.....	341	-	35	-	376
Truck.....	80	-	591	156	826
Indiana	148	-	4	-	152
River.....	148	-	-	-	148
Truck.....	-	-	4	-	4
Kansas	73	-	1	-	74
Truck.....	73	-	1	-	74
Kentucky Total	336	-	45	*	381
Railroad.....	109	-	-	-	109
River.....	227	-	45	-	272
Truck.....	-	-	-	*	*
Eastern	125	-	45	*	170
Railroad.....	109	-	-	-	109
River.....	16	-	45	-	61
Truck.....	-	-	-	*	*
Western	211	-	-	-	211
River.....	211	-	-	-	211
Missouri	225	-	55	*	281
Truck.....	225	-	55	*	281
Pennsylvania Total	-	-	*	*	*
Railroad.....	-	-	*	-	*
Truck.....	-	-	-	*	*

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: MISSOURI (Continued)					
Anthracite	—	—	*	*	*
Railroad.....	—	—	*	—	*
Truck.....	—	—	—	*	*
Utah	—	—	—	10	10
Railroad.....	—	—	—	10	10
West Virginia Total	34	—	23	—	57
River.....	34	—	23	—	57
Northern	34	—	—	—	34
River.....	34	—	—	—	34
Southern	—	—	23	—	23
River.....	—	—	23	—	23
Wyoming	38,358	—	—	—	38,358
Railroad.....	38,358	—	—	—	38,358
State Total	41,081	—	773	166	42,019
Railroad.....	39,952	—	*	10	39,963
River.....	750	—	103	—	853
Truck.....	378	—	669	156	1,203
DESTINATION: MONTANA					
Colorado	6	—	—	—	6
Railroad.....	6	—	—	—	6
Montana	10,192	—	164	4	10,360
Truck.....	345	—	1	4	349
Tramway, Conveyor, and Slurry Pipeline.....	9,848	—	163	—	10,011
Utah	—	—	3	*	3
Truck.....	—	—	3	*	3
Wyoming	396	—	61	*	457
Railroad.....	396	—	61	—	456
Truck.....	—	—	—	*	*
State Total	10,594	—	227	4	10,825
Railroad.....	401	—	61	—	462
Truck.....	345	—	4	4	353
Tramway, Conveyor, and Slurry Pipeline.....	9,848	—	163	—	10,011
DESTINATION: NEBRASKA					
Colorado	6	—	91	—	97
Railroad.....	6	—	91	—	97
Montana	—	—	81	—	81
Railroad.....	—	—	81	—	81
Pennsylvania Total	—	—	11	—	11
Railroad.....	—	—	11	—	11
Truck.....	—	—	*	—	*
Anthracite	—	—	11	—	11
Railroad.....	—	—	11	—	11
Truck.....	—	—	*	—	*
West Virginia Total	5	—	—	—	5
Railroad.....	5	—	—	—	5
Southern	5	—	—	—	5
Railroad.....	5	—	—	—	5
Wyoming	11,537	—	124	*	11,661
Railroad.....	11,537	—	124	—	11,661
Truck.....	—	—	—	*	*
State Total	11,548	—	307	*	11,855
Railroad.....	11,548	—	307	—	11,855
Truck.....	—	—	*	*	*
DESTINATION: NEVADA					
Arizona	4,489	—	—	—	4,489
Tramway, Conveyor, and Slurry Pipeline.....	4,489	—	—	—	4,489
Colorado	20	—	—	—	20
Railroad.....	20	—	—	—	20

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: NEVADA (Continued)					
Utah	2,961	—	470	1	3,431
Railroad.....	2,948	—	78	—	3,026
Truck.....	—	—	392	1	393
Tramway, Conveyor, and Slurry Pipeline.....	12	—	—	—	12
West Virginia Total	—	—	36	—	36
River.....	—	—	36	—	36
Southern	—	—	36	—	36
River.....	—	—	36	—	36
State Total	7,470	—	505	1	7,976
Railroad.....	2,968	—	78	—	3,046
River.....	—	—	36	—	36
Truck.....	—	—	392	1	393
Tramway, Conveyor, and Slurry Pipeline.....	4,501	—	—	—	4,501
DESTINATION: NEW HAMPSHIRE					
Pennsylvania Total	777	—	2	4	783
Railroad.....	762	—	*	*	762
Tidewater.....	15	—	—	—	15
Truck.....	—	—	2	4	6
Anthracite	—	—	2	3	5
Railroad.....	—	—	*	*	*
Truck.....	—	—	2	3	5
Bituminous	777	—	—	1	778
Railroad.....	762	—	—	—	762
Tidewater.....	15	—	—	—	15
Truck.....	—	—	—	1	1
West Virginia Total	216	—	—	—	216
Railroad.....	216	—	—	—	216
Northern	208	—	—	—	208
Railroad.....	208	—	—	—	208
Southern	8	—	—	—	8
Railroad.....	8	—	—	—	8
State Total	993	—	2	4	1,000
Railroad.....	979	—	*	*	979
Tidewater.....	15	—	—	—	15
Truck.....	—	—	2	4	6
DESTINATION: NEW JERSEY					
Kentucky Total	—	—	26	—	26
Truck.....	—	—	26	—	26
Western	—	—	26	—	26
Truck.....	—	—	26	—	26
Pennsylvania Total	534	—	10	5	549
Railroad.....	534	—	*	*	534
Truck.....	*	—	10	5	14
Anthracite	*	—	10	5	14
Railroad.....	—	—	*	*	*
Truck.....	*	—	10	5	14
Bituminous	534	—	—	—	534
Railroad.....	534	—	—	—	534
Virginia	700	—	*	—	700
Tidewater.....	700	—	—	—	700
Truck.....	—	—	*	—	*
West Virginia Total	1,677	—	—	—	1,677
Railroad.....	980	—	—	—	980
River.....	95	—	—	—	95
Tidewater.....	602	—	—	—	602
Northern	1,463	—	—	—	1,463
Railroad.....	940	—	—	—	940
River.....	70	—	—	—	70
Tidewater.....	454	—	—	—	454
Southern	214	—	—	—	214
Railroad.....	40	—	—	—	40
River.....	25	—	—	—	25
Tidewater.....	148	—	—	—	148

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: NEW JERSEY (Continued)					
State Total	2,911	—	36	5	2,952
Railroad.....	1,514	—	*	*	1,514
River.....	95	—	—	—	95
Tidewater.....	1,302	—	—	—	1,302
Truck.....	*	—	36	5	41
DESTINATION: NEW MEXICO					
Colorado	57	—	73	*	131
Truck.....	57	—	73	*	131
New Mexico	15,811	—	—	9	¹ 15,819
Railroad.....	9,062	—	—	—	9,062
Truck.....	—	—	—	9	9
Tramway, Conveyor, and Slurry Pipeline.....	6,749	—	—	—	6,749
Unknown.....	—	—	—	—	1 0
Pennsylvania Total	—	—	*	—	*
Truck.....	—	—	*	—	*
Anthracite	—	—	*	—	*
Truck.....	—	—	*	—	*
State Total	15,867	—	73	9	¹ 15,950
Railroad.....	9,062	—	—	—	9,062
Truck.....	57	—	73	9	139
Tramway, Conveyor, and Slurry Pipeline.....	6,749	—	—	—	6,749
Unknown.....	—	—	—	—	1 0
DESTINATION: NEW YORK					
Kentucky Total	1,133	609	29	47	1,818
Railroad.....	1,068	609	27	5	1,709
River.....	—	—	2	—	2
Great Lakes.....	65	—	—	—	65
Truck.....	—	—	—	43	43
Eastern	1,133	609	29	47	1,818
Railroad.....	1,068	609	27	5	1,709
River.....	—	—	2	—	2
Great Lakes.....	65	—	—	—	65
Truck.....	—	—	—	43	43
Ohio	5	—	3	4	12
Railroad.....	5	—	—	4	9
Truck.....	*	—	3	—	4
Pennsylvania Total	4,478	4	525	91	5,098
Railroad.....	3,577	—	344	2	3,923
River.....	—	—	45	2	46
Great Lakes.....	555	—	—	—	555
Truck.....	345	4	136	88	573
Anthracite	—	—	45	47	92
Railroad.....	—	—	14	2	15
Truck.....	—	—	32	45	77
Bituminous	4,478	4	479	44	5,006
Railroad.....	3,577	—	330	—	3,908
River.....	—	—	45	2	46
Great Lakes.....	555	—	—	—	555
Truck.....	345	4	104	43	496
Virginia	—	4	—	—	4
Railroad.....	—	4	—	—	4
West Virginia Total	4,200	660	630	5	5,495
Railroad.....	3,821	660	395	—	4,876
River.....	—	—	234	5	239
Great Lakes.....	50	—	—	—	50
Tidewater.....	330	—	—	—	330
Truck.....	—	—	—	1	1
Northern	3,632	—	386	1	4,018
Railroad.....	3,631	—	386	—	4,017
Great Lakes.....	1	—	—	—	1
Truck.....	—	—	—	1	1

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: NEW YORK (Continued)					
Southern	569	660	244	5	1,477
Railroad	190	660	9	—	859
River	—	—	234	5	239
Great Lakes	49	—	—	—	49
Tidewater	330	—	—	—	330
State Total	9,816	1,277	1,187	147	12,427
Railroad	8,471	1,273	767	10	10,521
River	—	—	281	6	287
Great Lakes	670	—	—	—	670
Tidewater	330	—	—	—	330
Truck	345	4	139	131	619
DESTINATION: NORTH CAROLINA					
Kentucky Total	15,716	—	1,372	91	17,179
Railroad	15,628	—	1,128	90	16,847
River	—	—	1	—	1
Truck	89	—	243	*	332
Eastern	15,716	—	1,372	91	17,179
Railroad	15,628	—	1,128	90	16,847
River	—	—	1	—	1
Truck	89	—	243	*	332
Pennsylvania Total	—	—	1	—	1
Railroad	—	—	*	—	*
Truck	—	—	1	—	1
Anthracite	—	—	1	—	1
Railroad	—	—	*	—	*
Truck	—	—	1	—	1
Tennessee	—	—	22	*	22
Railroad	—	—	22	—	22
Truck	—	—	—	*	*
Virginia	294	—	415	26	735
Railroad	257	—	387	26	670
Truck	37	—	28	*	65
West Virginia Total	9,507	—	189	84	9,780
Railroad	9,329	—	184	84	9,597
Tidewater	178	—	—	—	178
Truck	—	—	5	—	5
Southern	9,507	—	189	84	9,780
Railroad	9,329	—	184	84	9,597
Tidewater	178	—	—	—	178
Truck	—	—	5	—	5
State Total	25,518	—	1,999	200	27,717
Railroad	25,214	—	1,721	200	27,135
River	—	—	1	—	1
Tidewater	178	—	—	—	178
Truck	126	—	276	1	403
DESTINATION: NORTH DAKOTA					
Illinois	—	—	—	*	*
Truck	—	—	—	*	*
Montana	172	—	288	57	517
Railroad	172	—	288	57	517
North Dakota	24,296	—	6,200	61	30,557
Railroad	425	—	—	—	425
Truck	4,202	—	—	61	4,263
Tramway, Conveyor, and Slurry Pipeline	19,669	—	6,200	—	25,869
Pennsylvania Total	—	—	*	—	*
Truck	—	—	*	—	*
Anthracite	—	—	*	—	*
Truck	—	—	*	—	*
Wyoming	65	—	—	—	65
Railroad	65	—	—	—	65

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: NORTH DAKOTA (Continued)					
State Total	24,533	—	6,488	118	31,139
Railroad.....	662	—	288	57	1,007
Truck.....	4,202	—	*	61	4,263
Tramway, Conveyor, and Slurry Pipeline.....	19,669	—	6,200	—	25,869
DESTINATION: OHIO					
Illinois	2	—	—	—	2
River.....	2	—	—	—	2
Indiana	7	—	—	—	7
River.....	7	—	—	—	7
Kentucky Total	7,799	288	873	116	9,074
Railroad.....	911	288	320	—	1,519
River.....	5,726	—	141	43	5,909
Great Lakes.....	835	—	38	—	872
Truck.....	327	—	374	73	774
Eastern	7,799	288	873	116	9,074
Railroad.....	911	288	320	—	1,519
River.....	5,726	—	141	43	5,909
Great Lakes.....	835	—	38	—	872
Truck.....	327	—	374	73	774
Ohio	21,824	—	1,170	96	23,091
Railroad.....	1,246	—	—	—	1,246
River.....	4,403	—	—	—	4,403
Truck.....	8,319	—	1,168	96	9,584
Tramway, Conveyor, and Slurry Pipeline.....	7,856	—	2	—	7,858
Pennsylvania Total	5,736	10	284	3	6,033
Railroad.....	2,040	—	*	—	2,041
River.....	3,528	9	91	—	3,627
Great Lakes.....	133	—	111	—	244
Truck.....	34	1	82	3	120
Anthracite	—	1	7	3	11
Railroad.....	—	—	*	—	*
Truck.....	—	1	7	3	11
Bituminous	5,736	9	277	—	6,021
Railroad.....	2,040	—	—	—	2,040
River.....	3,528	9	91	—	3,627
Great Lakes.....	133	—	111	—	244
Truck.....	34	—	75	—	109
Virginia	577	164	119	—	861
Railroad.....	—	164	119	—	283
River.....	577	—	—	—	577
West Virginia Total	20,206	1,005	757	176	22,144
Railroad.....	3,032	851	188	—	4,071
River.....	17,091	—	91	170	17,352
Great Lakes.....	—	154	149	—	303
Truck.....	83	—	330	5	418
Northern	4,630	—	—	—	4,630
Railroad.....	2,139	—	—	—	2,139
River.....	2,481	—	—	—	2,481
Truck.....	9	—	—	—	9
Southern	15,576	1,005	757	176	17,514
Railroad.....	892	851	188	—	1,931
River.....	14,610	—	91	170	14,871
Great Lakes.....	—	154	149	—	303
Truck.....	73	—	330	5	409
Wyoming	2,435	—	—	—	2,435
Railroad.....	2,414	—	—	—	2,414
River.....	21	—	—	—	21
State Total	58,585	1,467	3,203	391	63,646
Railroad.....	9,643	1,302	628	—	11,574
River.....	31,355	9	322	213	31,899
Great Lakes.....	968	154	298	—	1,420
Truck.....	8,762	1	1,954	178	10,895
Tramway, Conveyor, and Slurry Pipeline.....	7,856	—	2	—	7,858

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: OKLAHOMA					
Indiana	-	-	1	-	1
River.....	-	-	1	-	1
Kentucky Total	-	-	27	-	27
River.....	-	-	27	-	27
Eastern	-	-	27	-	27
River.....	-	-	27	-	27
New Mexico	-	-	119	-	119
Railroad.....	-	-	119	-	119
Oklahoma	1,234	-	176	1	1,411
Truck.....	1,234	-	176	1	1,411
Pennsylvania Total	-	-	*	-	*
Railroad.....	-	-	*	-	*
Truck.....	-	-	*	-	*
Anthracite	-	-	*	-	*
Railroad.....	-	-	*	-	*
Truck.....	-	-	*	-	*
Virginia	-	-	19	-	19
River.....	-	-	19	-	19
West Virginia Total	-	-	121	-	121
Railroad.....	-	-	32	-	32
River.....	-	-	89	-	89
Southern	-	-	121	-	121
Railroad.....	-	-	32	-	32
River.....	-	-	89	-	89
Wyoming	19,254	-	4	-	19,258
Railroad.....	19,254	-	4	-	19,258
State Total	20,489	-	468	1	20,957
Railroad.....	19,254	-	156	-	19,410
River.....	-	-	136	-	136
Truck.....	1,234	-	176	1	1,411
DESTINATION: OREGON					
Kentucky Total	-	-	14	-	14
Railroad.....	-	-	14	-	14
Eastern	-	-	14	-	14
Railroad.....	-	-	14	-	14
Pennsylvania Total	-	-	15	-	15
Railroad.....	-	-	15	-	15
Anthracite	-	-	15	-	15
Railroad.....	-	-	15	-	15
Utah	-	-	*	*	1
Truck.....	-	-	*	*	1
Wyoming	2,004	-	58	-	2,062
Railroad.....	2,004	-	58	-	2,062
State Total	2,004	-	88	*	2,092
Railroad.....	2,004	-	88	-	2,091
Truck.....	-	-	*	*	1
DESTINATION: PENNSYLVANIA					
Kentucky Total	40	312	363	51	766
Railroad.....	17	46	37	42	141
River.....	-	257	254	-	511
Truck.....	23	10	71	9	114
Eastern	40	312	363	51	766
Railroad.....	17	46	37	42	141
River.....	-	257	254	-	511
Truck.....	23	10	71	9	114
Maryland	16	-	-	-	16
Truck.....	16	-	-	-	16
Ohio	270	-	175	-	445
River.....	129	-	-	-	129
Truck.....	141	-	175	-	316

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: PENNSYLVANIA (Continued)					
Pennsylvania Total	37,042	1,607	2,487	777	¹ 41,917
Railroad.....	11,267	—	100	11	11,378
River.....	3,829	1,607	36	12	5,484
Truck.....	17,093	—	2,290	754	20,137
Tramway, Conveyor, and Slurry Pipeline.....	4,853	—	62	—	4,915
Unknown.....	—	—	—	—	1 3
Anthracite	2,977	—	393	607	¹ 3,980
Railroad.....	77	—	36	11	124
Truck.....	2,900	—	357	596	3,853
Unknown.....	—	—	—	—	1 2
Bituminous	34,065	1,607	2,094	170	¹ 37,937
Railroad.....	11,190	—	64	—	11,254
River.....	3,829	1,607	36	12	5,484
Truck.....	14,193	—	1,932	159	16,284
Tramway, Conveyor, and Slurry Pipeline.....	4,853	—	62	—	4,915
Unknown.....	—	—	—	—	1 1
Utah	*	—	—	—	*
Truck.....	*	—	—	—	*
Virginia	*	195	8	*	204
Railroad.....	—	152	8	—	159
River.....	*	44	—	—	44
Truck.....	—	—	—	*	*
West Virginia Total	8,970	5,581	1,670	12	16,234
Railroad.....	1,709	908	880	—	3,497
River.....	6,957	4,673	694	—	12,324
Tidewater.....	12	—	—	—	12
Truck.....	285	—	97	12	394
Tramway, Conveyor, and Slurry Pipeline.....	8	—	—	—	8
Northern	8,570	—	342	6	8,918
Railroad.....	1,679	—	250	—	1,929
River.....	6,845	—	—	—	6,845
Truck.....	46	—	92	6	144
Southern	400	5,581	1,328	6	7,315
Railroad.....	30	908	630	—	1,568
River.....	111	4,673	694	—	5,478
Tidewater.....	12	—	—	—	12
Truck.....	239	—	4	6	249
Tramway, Conveyor, and Slurry Pipeline.....	8	—	—	—	8
State Total	46,338	7,696	4,703	841	¹ 59,582
Railroad.....	12,992	1,105	1,025	53	15,175
River.....	10,914	6,581	984	12	18,492
Tidewater.....	12	—	—	—	12
Truck.....	17,558	10	2,633	776	20,978
Tramway, Conveyor, and Slurry Pipeline.....	4,861	—	62	—	4,923
Unknown.....	—	—	—	—	1 3
DESTINATION: RHODE ISLAND					
Pennsylvania Total	—	—	*	2	2
Truck.....	—	—	*	2	2
Anthracite	—	—	*	2	2
Truck.....	—	—	*	2	2
State Total	—	—	*	2	2
Truck.....	—	—	*	2	2
DESTINATION: SOUTH CAROLINA					
Kentucky Total	11,423	—	1,627	9	13,060
Railroad.....	11,423	—	1,583	9	13,015
Truck.....	—	—	44	*	44
Eastern	11,423	—	1,627	9	13,060
Railroad.....	11,423	—	1,583	9	13,015
Truck.....	—	—	44	*	44
Pennsylvania Total	—	—	54	*	54
Railroad.....	—	—	53	—	53
Truck.....	—	—	1	*	1

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: SOUTH CAROLINA (Continued)					
Anthracite	-	-	54	*	54
Railroad.....	-	-	53	-	53
Truck.....	-	-	1	*	1
Tennessee	381	-	-	-	381
Railroad.....	381	-	-	-	381
Virginia	1,071	-	270	*	1,342
Railroad.....	1,071	-	270	-	1,341
Truck.....	-	-	*	*	1
West Virginia Total	711	-	91	13	815
Railroad.....	711	-	91	13	815
Truck.....	-	-	*	-	*
Southern	711	-	91	13	815
Railroad.....	711	-	91	13	815
Truck.....	-	-	*	-	*
State Total	13,586	-	2,042	23	15,651
Railroad.....	13,586	-	1,997	22	15,605
Truck.....	-	-	45	1	46
DESTINATION: SOUTH DAKOTA					
Kentucky Total	-	-	7	-	7
River.....	-	-	7	-	7
Eastern	-	-	7	-	7
River.....	-	-	7	-	7
Montana	1,698	-	-	-	1,698
Railroad.....	1,698	-	-	-	1,698
Wyoming	151	-	278	*	430
Truck.....	151	-	278	*	430
State Total	1,850	-	285	*	2,135
Railroad.....	1,698	-	-	-	1,698
River.....	-	-	7	-	7
Truck.....	151	-	278	*	430
DESTINATION: TENNESSEE					
Colorado	2,064	-	-	-	2,064
Railroad.....	2,064	-	-	-	2,064
Illinois	2,757	-	*	6	2,762
Railroad.....	331	-	-	-	331
River.....	2,425	-	*	6	2,431
Indiana	47	-	-	-	47
River.....	47	-	-	-	47
Kentucky Total	13,244	-	2,093	18	15,355
Railroad.....	8,862	-	1,195	12	10,069
River.....	1,923	-	225	-	2,148
Truck.....	2,459	-	674	6	3,139
Eastern	7,338	-	1,999	18	9,355
Railroad.....	6,303	-	1,195	12	7,510
River.....	719	-	136	-	856
Truck.....	315	-	668	6	989
Western	5,907	-	94	-	6,000
Railroad.....	2,559	-	-	-	2,559
River.....	1,204	-	88	-	1,292
Truck.....	2,144	-	6	-	2,150
Pennsylvania Total	684	-	16	-	701
Railroad.....	-	-	*	-	*
River.....	684	-	5	-	689
Truck.....	-	-	12	-	12
Anthracite	-	-	16	-	16
Railroad.....	-	-	*	-	*
River.....	-	-	5	-	5
Truck.....	-	-	12	-	12
Bituminous	684	-	-	-	684
River.....	684	-	-	-	684

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: TENNESSEE (Continued)					
Tennessee	1,160	—	261	1	1,422
Railroad.....	377	—	157	—	534
River.....	—	—	3	—	3
Truck.....	783	—	101	1	885
Utah	996	—	—	—	996
Railroad.....	343	—	—	—	343
River.....	654	—	—	—	654
Virginia	1,601	—	659	*	2,260
Railroad.....	1,601	—	616	—	2,217
River.....	—	—	1	—	1
Truck.....	—	—	41	*	42
West Virginia Total	223	—	155	—	378
Railroad.....	7	—	1	—	8
River.....	216	—	148	—	364
Truck.....	—	—	6	—	6
Southern	223	—	155	—	378
Railroad.....	7	—	1	—	8
River.....	216	—	148	—	364
Truck.....	—	—	6	—	6
Wyoming	3,615	—	135	—	3,750
Railroad.....	3,615	—	135	—	3,750
State Total	26,392	—	3,319	25	29,735
Railroad.....	17,201	—	2,103	12	19,316
River.....	5,949	—	382	6	6,336
Truck.....	3,242	—	834	7	4,083
DESTINATION: TEXAS					
Arkansas	—	—	3	—	3
Truck.....	—	—	3	—	3
Colorado	3,189	—	120	—	3,309
Railroad.....	3,189	—	120	—	3,309
New Mexico	—	—	472	—	472
Railroad.....	—	—	472	—	472
Oklahoma	—	—	88	—	88
Railroad.....	—	—	88	—	88
Pennsylvania Total	*	—	7	*	7
Railroad.....	—	—	2	—	2
River.....	—	—	3	—	3
Truck.....	*	—	2	*	2
Anthracite	*	—	7	—	7
Railroad.....	—	—	2	—	2
River.....	—	—	3	—	3
Truck.....	*	—	2	—	2
Bituminous	—	—	—	*	*
Truck.....	—	—	—	*	*
Texas	49,834	—	2,935	—	52,769
Railroad.....	23,300	—	42	—	23,342
Truck.....	13,916	—	424	—	14,340
Tramway, Conveyor, and Slurry Pipeline.....	12,618	—	2,469	—	15,087
Virginia	—	—	7	14	21
Railroad.....	—	—	7	14	21
West Virginia Total	1	—	—	—	1
River.....	1	—	—	—	1
Northern	1	—	—	—	1
River.....	1	—	—	—	1
Wyoming	44,893	—	196	—	45,089
Railroad.....	44,893	—	196	—	45,089
State Total	97,915	—	3,829	14	101,759
Railroad.....	71,381	—	928	14	72,323
River.....	1	—	3	—	4
Truck.....	13,916	—	429	*	14,345
Tramway, Conveyor, and Slurry Pipeline.....	12,618	—	2,469	—	15,087

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: UTAH					
Colorado	1,797	441	—	—	2,238
Railroad	1,797	441	—	—	2,238
Pennsylvania Total	—	153	*	—	153
Railroad	—	153	*	—	153
Anthracite	—	—	*	—	*
Railroad	—	—	*	—	*
Bituminous	—	153	—	—	153
Railroad	—	153	—	—	153
Utah	11,576	3	838	113	12,531
Railroad	3,839	—	—	—	3,839
Truck	4,382	3	838	113	5,337
Tramway, Conveyor, and Slurry Pipeline	3,355	—	—	—	3,355
Virginia	—	27	—	—	27
Railroad	—	27	—	—	27
West Virginia Total	—	115	10	—	125
Railroad	—	115	10	—	125
Southern	—	115	10	—	125
Railroad	—	115	10	—	125
Wyoming	—	—	—	*	*
Truck	—	—	—	*	*
State Total	13,373	740	848	113	15,074
Railroad	5,636	736	10	—	6,382
Truck	4,382	3	838	113	5,337
Tramway, Conveyor, and Slurry Pipeline	3,355	—	—	—	3,355
DESTINATION: VERMONT					
Pennsylvania Total	—	—	—	2	2
Truck	—	—	—	2	2
Anthracite	—	—	—	2	2
Truck	—	—	—	2	2
West Virginia Total	—	—	*	—	*
Truck	—	—	*	—	*
Southern	—	—	*	—	*
Truck	—	—	*	—	*
State Total	—	—	*	2	2
Truck	—	—	*	2	2
DESTINATION: VIRGINIA					
Kentucky Total	5,590	—	724	85	6,400
Railroad	5,565	—	711	55	6,331
Truck	25	—	13	30	68
Eastern	4,526	—	724	85	5,336
Railroad	4,501	—	711	55	5,267
Truck	25	—	13	30	68
Western	1,064	—	—	*	1,064
Railroad	1,064	—	—	—	1,064
Truck	—	—	—	*	*
Maryland	38	—	2	—	40
Truck	38	—	2	—	40
Pennsylvania Total	381	—	23	1	405
Railroad	80	—	*	—	80
Truck	301	—	23	1	325
Anthracite	—	—	2	1	3
Railroad	—	—	*	—	*
Truck	—	—	2	1	3
Bituminous	381	—	21	*	402
Railroad	80	—	—	—	80
Truck	301	—	21	*	322
Virginia	5,960	942	524	24	7,602
Railroad	4,423	—	484	10	4,917
Truck	1,537	—	20	14	1,571
Tramway, Conveyor, and Slurry Pipeline	—	942	21	—	963
Unknown	—	—	—	—	1 152

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: VIRGINIA (Continued)					
West Virginia Total	3,864	76	1,289	61	5,291
Railroad.....	3,188	1	1,184	47	4,419
Truck.....	676	—	106	14	796
Tramway, Conveyor, and Slurry Pipeline.....	—	75	—	—	75
Northern	738	—	*	—	738
Railroad.....	62	—	—	—	62
Truck.....	676	—	*	—	677
Southern	3,126	76	1,289	61	4,552
Railroad.....	3,126	1	1,184	47	4,357
Truck.....	*	—	105	14	120
Tramway, Conveyor, and Slurry Pipeline.....	—	75	—	—	75
Wyoming	55	—	—	—	55
Railroad.....	55	—	—	—	55
State Total	15,888	1,018	2,563	172	¹ 19,792
Railroad.....	13,311	1	2,378	112	15,802
Truck.....	2,577	—	164	60	2,801
Tramway, Conveyor, and Slurry Pipeline.....	—	1,017	21	—	1,038
Unknown.....	—	—	—	—	¹ 152
DESTINATION: WASHINGTON					
Colorado	4	—	3	—	7
Railroad.....	4	—	3	—	7
Montana	1,503	—	—	—	1,503
Railroad.....	1,503	—	—	—	1,503
Utah	—	—	79	13	92
Railroad.....	—	—	71	12	84
Truck.....	—	—	7	1	8
Washington	4,622	—	—	—	4,622
Tramway, Conveyor, and Slurry Pipeline.....	4,622	—	—	—	4,622
Wyoming	—	—	—	1	1
Railroad.....	—	—	—	1	1
State Total	6,129	—	81	14	6,224
Railroad.....	1,507	—	74	13	1,594
Truck.....	—	—	7	1	8
Tramway, Conveyor, and Slurry Pipeline.....	4,622	—	—	—	4,622
DESTINATION: WEST VIRGINIA					
Illinois	—	—	—	*	*
Truck.....	—	—	—	*	*
Kentucky Total	6	33	330	1	370
Railroad.....	3	33	44	—	80
River.....	4	—	4	—	8
Truck.....	—	—	282	1	283
Eastern	6	33	330	1	370
Railroad.....	3	33	44	—	80
River.....	4	—	4	—	8
Truck.....	—	—	282	1	283
Maryland	2,977	—	1	—	2,978
Truck.....	2,977	—	1	—	2,978
Ohio	1,669	—	*	—	1,670
River.....	1,669	—	—	—	1,669
Truck.....	—	—	*	—	*
Pennsylvania Total	4,219	—	473	1	4,693
Railroad.....	85	—	*	—	85
River.....	3,348	—	410	—	3,758
Truck.....	135	—	43	1	179
Tramway, Conveyor, and Slurry Pipeline.....	651	—	20	—	671
Anthracite	—	—	42	1	42
Railroad.....	—	—	*	—	*
Truck.....	—	—	42	1	42
Bituminous	4,219	—	431	*	4,651
Railroad.....	85	—	—	—	85
River.....	3,348	—	410	—	3,758
Truck.....	135	—	1	*	137
Tramway, Conveyor, and Slurry Pipeline.....	651	—	20	—	671

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: WEST VIRGINIA (Continued)					
Virginia	22	392	—	*	415
Railroad.....	10	392	—	*	402
River.....	13	—	—	—	13
Truck.....	—	—	—	*	*
West Virginia Total	25,679	1,265	1,343	161	¹ 28,451
Railroad.....	9,514	454	132	73	10,172
River.....	10,011	811	137	—	10,959
Truck.....	3,380	—	788	88	4,255
Tramway, Conveyor, and Slurry Pipeline.....	2,776	—	286	—	3,061
Unknown.....	—	—	—	—	13
Northern	10,646	—	255	20	10,921
Railroad.....	349	—	23	—	372
River.....	4,586	—	51	—	4,637
Truck.....	2,936	—	95	20	3,050
Tramway, Conveyor, and Slurry Pipeline.....	2,776	—	86	—	2,862
Southern	15,033	1,265	1,088	141	¹ 17,529
Railroad.....	9,165	454	109	73	9,800
River.....	5,424	811	86	—	6,322
Truck.....	444	—	693	68	1,205
Tramway, Conveyor, and Slurry Pipeline.....	—	—	199	—	199
Unknown.....	—	—	—	—	13
State Total	34,574	1,690	2,147	162	¹ 38,576
Railroad.....	9,611	879	176	73	10,739
River.....	15,044	811	551	—	16,406
Truck.....	6,492	—	1,114	90	7,696
Tramway, Conveyor, and Slurry Pipeline.....	3,427	—	306	—	3,733
Unknown.....	—	—	—	—	13
DESTINATION: WISCONSIN					
Colorado	20	—	—	—	20
Railroad.....	20	—	—	—	20
Illinois	847	—	122	—	969
Railroad.....	38	—	91	—	130
River.....	809	—	—	—	809
Great Lakes.....	—	—	31	—	31
Indiana	174	—	71	—	245
Railroad.....	174	—	71	—	245
Kentucky Total	155	—	621	128	903
Railroad.....	*	—	261	1	262
River.....	14	—	32	126	172
Great Lakes.....	141	—	327	—	469
Truck.....	—	—	—	*	*
Eastern	155	—	457	128	740
Railroad.....	*	—	99	1	100
River.....	14	—	31	126	171
Great Lakes.....	141	—	327	—	469
Truck.....	—	—	—	*	*
Western	—	—	164	—	164
Railroad.....	—	—	162	—	162
River.....	—	—	1	—	1
Montana	2,052	—	1	—	2,053
Railroad.....	2,051	—	—	—	2,051
Truck.....	1	—	1	—	2
New Mexico	466	—	—	—	466
Railroad.....	466	—	—	—	466
Ohio	—	—	*	—	*
Great Lakes.....	—	—	*	—	*
Pennsylvania Total	2,097	—	50	*	2,147
Railroad.....	881	—	5	—	886
River.....	9	—	—	—	9
Great Lakes.....	1,207	—	44	—	1,251
Truck.....	—	—	1	*	1
Anthracite	—	—	6	*	6
Railroad.....	—	—	5	—	5
Truck.....	—	—	1	*	1

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: WISCONSIN (Continued)					
Bituminous	2,097	—	44	—	2,141
Railroad	881	—	—	—	881
River	9	—	—	—	9
Great Lakes	1,207	—	44	—	1,251
West Virginia Total	116	—	304	—	420
Railroad	*	—	10	—	10
River	—	—	1	—	1
Great Lakes	116	—	293	—	409
Northern	91	—	269	—	360
Great Lakes	91	—	269	—	360
Southern	25	—	35	—	60
Railroad	*	—	10	—	10
River	—	—	1	—	1
Great Lakes	25	—	24	—	49
Wyoming	19,570	—	386	—	19,956
Railroad	15,040	—	386	—	15,426
Great Lakes	4,530	—	—	—	4,530
State Total	25,497	—	1,555	128	27,180
Railroad	18,669	—	825	1	19,495
River	832	—	34	126	992
Great Lakes	5,995	—	695	—	6,690
Truck	1	—	1	*	3
DESTINATION: WYOMING					
Colorado	—	—	149	—	149
Truck	—	—	149	—	149
Montana	—	—	2	60	62
Railroad	—	—	2	60	62
Pennsylvania Total	—	—	*	—	*
Railroad	—	—	*	—	*
Anthracite	—	—	*	—	*
Railroad	—	—	*	—	*
Wyoming	25,624	—	1,996	99	27,719
Railroad	11,029	—	1,291	6	12,325
Truck	2,726	—	705	94	3,525
Tramway, Conveyor, and Slurry Pipeline	11,869	—	—	—	11,869
State Total	25,624	—	2,147	159	27,930
Railroad	11,029	—	1,293	66	12,387
Truck	2,726	—	855	94	3,674
Tramway, Conveyor, and Slurry Pipeline	11,869	—	—	—	11,869
DESTINATION: U.S. TOTAL					
Alabama	15,951	772	1,478	9	² 18,245
Railroad	8,124	565	53	—	8,742
River	4,296	—	—	—	4,296
Truck	3,531	207	1,425	9	5,173
Unknown	—	—	—	—	2 35
Alaska	440	—	—	530	970
Railroad	138	—	—	467	606
Truck	301	—	—	63	364
Arizona	12,169	—	—	—	12,169
Railroad	7,680	—	—	—	7,680
Tramway, Conveyor, and Slurry Pipeline	4,489	—	—	—	4,489
Arkansas	—	—	23	—	23
Truck	—	—	23	—	23
Colorado	25,387	492	1,634	15	³ 27,541
Railroad	19,797	492	1,078	—	21,367
River	1,086	—	1	—	1,087
Great Lakes	33	—	143	—	176
Truck	4,472	—	412	15	4,898
Unknown	—	—	—	—	3 13
Illinois	34,651	—	4,394	390	² 39,447
Railroad	17,772	—	1,622	—	19,394
River	11,803	—	361	49	12,212

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: U.S. TOTAL (Continued)					
Illinois					
Great Lakes	-	-	31	-	31
Tidewater	636	-	-	-	636
Truck	4,439	-	2,354	341	7,135
Tramway, Conveyor, and Slurry Pipeline	-	-	27	-	27
Unknown	-	-	-	-	2 12
Indiana	33,735	-	2,671	332	2 36,774
Railroad	23,405	-	1,306	*	24,711
River.....	923	-	288	-	1,210
Great Lakes.....	120	-	28	-	148
Truck	8,548	-	1,049	332	9,929
Tramway, Conveyor, and Slurry Pipeline	739	-	-	-	739
Unknown	-	-	-	-	2 36
Kansas	424	-	16	-	440
Truck	424	-	16	-	440
Kentucky Total	126,574	3,000	15,255	1,062	3 146,171
Railroad	83,442	2,399	8,608	377	94,826
River.....	25,742	257	2,183	358	28,540
Great Lakes.....	1,411	334	1,075	-	2,821
Tidewater	1,696	-	249	-	1,945
Truck	14,283	10	3,140	327	17,759
Unknown	-	-	-	-	3 280
Eastern	95,028	3,000	14,660	880	3 113,842
Railroad	76,254	2,399	8,432	377	87,462
River.....	9,765	257	1,882	233	12,138
Great Lakes.....	1,411	334	1,075	-	2,821
Tidewater	1,696	-	194	-	1,890
Truck	5,902	10	3,077	270	9,259
Unknown	-	-	-	-	3 273
Western	31,546	-	595	182	2 32,329
Railroad	7,188	-	176	-	7,364
River.....	15,977	-	301	125	16,403
Tidewater	-	-	55	-	55
Truck	8,381	-	63	57	8,501
Unknown	-	-	-	-	2 7
Louisiana	3,331	-	-	-	3,331
Truck	989	-	-	-	989
Tramway, Conveyor, and Slurry Pipeline	2,342	-	-	-	2,342
Maryland	3,825	-	212	2	2 4,058
Railroad	670	-	-	-	670
Truck	3,155	-	212	2	3,368
Unknown	-	-	-	-	2 19
Missouri	225	-	71	*	296
Railroad	-	-	15	-	15
Truck	225	-	56	*	281
Montana	40,435	-	1,300	124	41,860
Railroad	24,040	-	714	120	24,874
Great Lakes.....	6,171	-	171	-	6,343
Truck	376	-	252	4	632
Tramway, Conveyor, and Slurry Pipeline	9,848	-	163	-	10,011
New Mexico	26,839	-	1,178	9	1 28,026
Railroad	20,090	-	1,178	-	21,267
Truck	-	-	-	9	9
Tramway, Conveyor, and Slurry Pipeline	6,749	-	-	-	6,749
Unknown	-	-	-	-	1 0
North Dakota	24,296	-	6,200	61	30,557
Railroad	425	-	-	-	425
Truck	4,202	-	-	61	4,263
Tramway, Conveyor, and Slurry Pipeline	19,669	-	6,200	-	25,869
Ohio	24,721	-	1,634	123	2 26,503
Railroad	1,278	-	-	4	1,281
River.....	7,052	-	-	-	7,052
Great Lakes.....	-	-	*	-	*
Truck	8,535	-	1,631	119	10,285
Tramway, Conveyor, and Slurry Pipeline	7,856	-	2	-	7,858
Unknown	-	-	-	-	2 25

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: U.S. TOTAL (Continued)					
Oklahoma	1,300	—	423	1	² 1,731
Railroad	—	—	119	—	119
Truck	1,300	—	304	1	1,604
Unknown	—	—	—	—	2 8
Pennsylvania Total	64,613	2,083	4,684	962	³ 72,616
Railroad	27,247	322	632	14	28,216
River	11,769	1,616	882	39	14,306
Great Lakes	2,024	140	235	—	2,399
Tidewater	15	—	—	—	15
Truck	18,054	6	2,827	908	21,795
Tramway, Conveyor, and Slurry Pipeline	5,504	—	107	—	5,611
Unknown	—	—	—	—	³ 274
Anthracite	2,977	1	745	700	³ 4,445
Railroad	77	—	228	14	320
River	—	—	19	—	19
Truck	2,900	1	499	685	4,085
Unknown	—	—	—	—	³ 22
Bituminous	61,637	2,082	3,939	262	³ 68,172
Railroad	27,170	322	404	—	27,896
River	11,769	1,616	864	39	14,288
Great Lakes	2,024	140	235	—	2,399
Tidewater	15	—	—	—	15
Truck	15,154	4	2,328	223	17,710
Tramway, Conveyor, and Slurry Pipeline	5,504	—	107	—	5,611
Unknown	—	—	—	—	³ 253
Tennessee	2,062	—	669	8	² 2,741
Railroad	1,279	—	542	—	1,821
River	—	—	3	—	3
Truck	783	—	124	8	915
Unknown	—	—	—	—	2 1
Texas	49,978	—	2,935	—	52,913
Railroad	23,300	—	42	—	23,342
Truck	14,060	—	424	—	14,484
Tramway, Conveyor, and Slurry Pipeline	12,618	—	2,469	—	15,087
Utah	20,594	3	3,292	311	² 24,229
Railroad	12,190	—	2,015	123	14,328
River	654	—	—	—	654
Tidewater	—	—	34	—	34
Truck	4,383	3	1,243	188	5,817
Tramway, Conveyor, and Slurry Pipeline	3,367	—	—	—	3,367
Unknown	—	—	—	—	2 30
Virginia	14,565	3,065	2,818	76	³ 20,728
Railroad	10,869	2,047	2,685	61	15,662
River	1,420	76	20	—	1,517
Tidewater	701	—	—	—	701
Truck	1,574	*	92	15	1,681
Tramway, Conveyor, and Slurry Pipeline	—	942	21	—	963
Unknown	—	—	—	—	³ 204
Washington	4,622	—	—	—	4,622
Tramway, Conveyor, and Slurry Pipeline	4,622	—	—	—	4,622
West Virginia Total	106,029	18,712	9,157	736	³ 135,082
Railroad	50,727	10,980	4,299	252	66,259
River	41,268	6,345	2,361	283	50,258
Great Lakes	277	1,311	668	—	2,256
Tidewater	5,645	—	—	—	5,645
Truck	5,328	—	1,542	200	7,071
Tramway, Conveyor, and Slurry Pipeline	2,783	75	286	—	3,145
Unknown	—	—	—	—	³ 448
Northern	38,475	—	1,764	62	² 40,410
Railroad	14,271	—	905	—	15,175
River	15,725	—	139	—	15,863
Great Lakes	92	—	341	—	433
Tidewater	1,120	—	—	—	1,120
Truck	4,492	—	293	62	4,847
Tramway, Conveyor, and Slurry Pipeline	2,776	—	86	—	2,862
Unknown	—	—	—	—	2 110

See footnotes at end of table.

Table 64. Domestic Distribution of U.S. Coal by Destination State, Consumer, Origin and Method of Transportation, 1998 (Continued)
(Thousand Short Tons)

Coal-Producing State of Origin by Method of Transportation	Electric Utilities	Coke Plants	Industrial Plants (Except Coke)	Residential and Commercial	Total
DESTINATION: U.S. TOTAL (Continued)					
Southern	67,554	18,712	7,393	673	³ 94,671
Railroad	36,456	10,980	3,395	252	51,083
River	25,544	6,345	2,223	283	34,395
Great Lakes	185	1,311	327	-	1,824
Tidewater	4,525	-	-	-	4,525
Truck	836	-	1,249	138	2,223
Tramway, Conveyor, and Slurry Pipeline	8	75	199	-	283
Unknown	-	-	-	-	³ 339
Wyoming	305,888	-	5,142	105	² 311,162
Railroad	269,113	-	3,654	8	272,775
River	16,437	-	-	-	16,437
Great Lakes	5,086	-	415	-	5,500
Tidewater	468	-	-	-	468
Truck	2,915	-	1,074	97	4,085
Tramway, Conveyor, and Slurry Pipeline	11,869	-	-	-	11,869
Unknown	-	-	-	-	³ 2 28
U.S. Total	942,655	28,128	65,184	4,856	³ 1,042,236
Railroad	601,587	16,806	28,562	1,427	648,382
River	122,449	8,294	6,101	729	137,573
Great Lakes	15,123	1,785	2,766	-	19,675
Tidewater	9,162	-	282	-	9,444
Truck	101,878	226	18,197	2,700	123,000
Tramway, Conveyor, and Slurry Pipeline	92,456	1,017	9,275	-	102,749
Unknown	-	-	-	-	³ 1,413

¹ Includes distribution to the transportation sector.

² Includes distribution to unknown consumers.

³ Includes distribution to both the transportation sector and unknown consumers.

* Quantity is less than 500 short tons or percent is less than .05.

Note: Total may not equal sum of components because of independent rounding.

Source: Energy Information Administration, Form EIA-6A, "Coal Distribution Report."

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1998

(Thousand Short Tons)

Origin State and Destination State	Railroad	Water				Truck	Tramway, Conveyor, and Slurry Pipeline	Unknown	Total
		River	Great Lakes	Tidewater	Total				
Alabama	8,742	4,296	—	4,801	9,097	5,173	—	35	23,046
Alabama	8,477	4,271	—	—	4,271	5,083	—	—	17,831
Arkansas	64	—	—	—	—	15	—	—	78
Florida	—	24	—	—	24	—	—	—	24
Georgia	72	—	—	—	—	2	—	—	74
Illinois	71	—	—	—	—	—	—	—	71
Indiana	58	—	—	—	—	—	—	—	58
Mississippi	—	—	—	—	—	73	—	—	73
Unknown State	—	—	—	—	—	—	—	35	35
Foreign	—	—	—	4,801	4,801	—	—	—	4,801
Alaska	606	—	—	371	371	364	—	—	1,341
Alaska	606	—	—	—	—	364	—	—	970
Foreign	—	—	—	371	371	—	—	—	371
Arizona	7,680	—	—	—	—	—	4,489	—	12,169
Arizona	7,680	—	—	—	—	—	—	—	7,680
Nevada	—	—	—	—	—	—	4,489	—	4,489
Arkansas	—	—	—	—	—	23	—	—	23
Maryland	—	—	—	—	—	1	—	—	1
Missouri	—	—	—	—	—	19	—	—	19
Texas	—	—	—	—	—	3	—	—	3
Colorado	22,698	1,087	176	422	1,685	4,898	—	13	29,294
Alabama	427	—	—	—	—	—	—	—	427
Arizona	467	—	—	—	—	*	—	—	467
Arkansas	5	—	—	—	—	—	—	—	5
California	78	—	—	—	—	—	—	—	78
Colorado	7,373	—	—	—	—	4,618	—	2	11,993
Illinois	1,807	626	—	—	626	—	—	—	2,433
Indiana	51	—	—	—	—	—	—	—	51
Iowa	144	451	—	—	451	—	—	—	595
Kansas	1,289	—	—	—	—	—	—	—	1,289
Kentucky	1,952	10	—	—	10	—	—	—	1,962
Michigan	—	—	176	—	176	—	—	—	176
Missouri	14	—	—	—	—	—	—	—	14
Montana	6	—	—	—	—	—	—	—	6
Nebraska	97	—	—	—	—	—	—	—	97
Nevada	20	—	—	—	—	—	—	—	20
New Mexico	—	—	—	—	—	131	—	—	131
Tennessee	2,064	—	—	—	—	—	—	—	2,064
Texas	3,309	—	—	—	—	—	—	—	3,309
Utah	2,238	—	—	—	—	—	—	—	2,238
Washington	7	—	—	—	—	—	—	—	7
Wisconsin	20	—	—	—	—	—	—	—	20
Wyoming	—	—	—	—	—	149	—	—	149
Unknown State	—	—	—	—	—	—	—	11	11
Foreign	1,332	—	—	422	422	—	—	—	1,754
Illinois	19,394	12,212	31	943	13,186	7,135	27	12	39,754
Alabama	269	540	—	—	540	—	—	—	809
Arkansas	12	—	—	—	—	—	—	—	12
Florida	1,330	4,935	—	—	4,935	—	—	—	6,265
Georgia	676	—	—	—	—	—	—	—	676
Illinois	10,274	568	—	—	568	5,784	27	—	16,652
Indiana	3,791	49	—	—	49	344	—	—	4,184
Iowa	299	469	—	—	469	181	—	—	949
Kansas	41	—	—	—	—	—	—	—	41
Kentucky	684	2	—	—	2	*	—	—	686
Louisiana	—	1,113	—	—	1,113	—	—	—	1,113
Minnesota	87	17	—	—	17	—	—	—	104
Mississippi	—	902	—	636	1,538	—	—	—	1,538
Missouri	1,471	376	—	—	376	826	—	—	2,674
North Dakota	—	—	—	—	—	*	—	—	*
Ohio	—	2	—	—	2	—	—	—	2
Tennessee	331	2,431	—	—	2,431	—	—	—	2,762
West Virginia	—	—	—	—	—	*	—	—	*
Wisconsin	130	809	31	—	840	—	—	—	969
Unknown State	—	—	—	—	—	—	—	12	12

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1998
(Continued)
(Thousand Short Tons)

Origin State and Destination State	Railroad	Water				Truck	Tramway, Conveyor, and Slurry Pipeline	Unknown	Total
		River	Great Lakes	Tidewater	Total				
Illinois (Continued)									
Foreign.....	-	-	-	307	307	-	-	-	307
Indiana	24,711	1,210	148	-	1,358	9,929	739	36	36,774
Florida.....	-	41	-	-	41	-	-	-	41
Illinois.....	1,741	-	-	-	-	67	-	-	1,807
Indiana.....	22,400	400	-	-	400	9,333	739	-	32,872
Iowa.....	259	-	-	-	-	-	-	-	259
Kentucky.....	-	567	-	-	567	526	-	-	1,093
Michigan.....	-	-	148	-	148	-	-	-	148
Minnesota.....	67	-	-	-	-	-	-	-	67
Missouri.....	-	148	-	-	148	4	-	-	152
Ohio.....	-	7	-	-	7	-	-	-	7
Oklahoma.....	-	1	-	-	1	-	-	-	1
Tennessee.....	-	47	-	-	47	-	-	-	47
Wisconsin.....	245	-	-	-	-	-	-	-	245
Unknown State.....	-	-	-	-	-	-	-	36	36
Kansas	-	-	-	-	-	440	-	-	440
Kansas.....	-	-	-	-	-	366	-	-	366
Missouri.....	-	-	-	-	-	74	-	-	74
Kentucky	95,156	28,540	3,947	7,417	39,905	17,762	-	280	153,102
Alabama.....	943	1,893	-	-	1,893	19	-	-	2,855
Connecticut.....	40	-	-	420	420	-	-	-	460
Delaware.....	92	-	-	-	-	-	-	-	92
Florida.....	13,046	2,183	-	890	3,073	39	-	-	16,157
Georgia.....	16,355	-	-	-	-	152	-	-	16,507
Illinois.....	487	397	-	-	397	101	-	-	985
Indiana.....	1,299	1,256	-	-	1,256	468	-	-	3,023
Iowa.....	22	716	-	-	716	*	-	-	738
Kentucky.....	5,291	12,269	-	-	12,269	12,119	-	10	29,690
Louisiana.....	-	672	-	-	672	-	-	-	672
Maine.....	-	-	-	249	249	-	-	-	249
Maryland.....	*	-	-	349	349	-	-	-	349
Massachusetts.....	206	-	-	37	37	-	-	-	243
Michigan.....	5,991	-	1,398	-	1,398	38	-	-	7,427
Minnesota.....	6	70	17	-	87	*	-	-	93
Mississippi.....	952	28	-	-	28	-	-	-	980
Missouri.....	109	272	-	-	272	*	-	-	381
New Jersey.....	-	-	-	-	-	26	-	-	26
New York.....	1,709	2	65	-	67	43	-	-	1,818
North Carolina.....	16,847	1	-	-	1	332	-	-	17,179
Ohio.....	1,519	5,909	872	-	6,782	774	-	-	9,074
Oklahoma.....	-	27	-	-	27	-	-	-	27
Oregon.....	14	-	-	-	-	-	-	-	14
Pennsylvania.....	141	511	-	-	511	114	-	-	766
South Carolina.....	13,015	-	-	-	-	44	-	-	13,060
South Dakota.....	-	7	-	-	7	-	-	-	7
Tennessee.....	10,069	2,148	-	-	2,148	3,139	-	-	15,355
Virginia.....	6,331	-	-	-	-	68	-	-	6,400
West Virginia.....	80	8	-	-	8	283	-	-	370
Wisconsin.....	262	172	469	-	641	*	-	-	903
Unknown State.....	-	-	-	-	-	-	-	270	270
Foreign.....	330	-	1,126	5,472	6,599	3	-	-	6,931
Kentucky, Eastern	87,792	12,138	3,947	6,816	22,901	9,261	-	273	120,227
Alabama.....	943	77	-	-	77	19	-	-	1,039
Connecticut.....	40	-	-	420	420	-	-	-	460
Delaware.....	92	-	-	-	-	-	-	-	92
Florida.....	12,342	631	-	890	1,521	39	-	-	13,902
Georgia.....	16,355	-	-	-	-	152	-	-	16,507
Illinois.....	321	238	-	-	238	101	-	-	661
Indiana.....	1,194	1,091	-	-	1,091	468	-	-	2,753
Iowa.....	22	212	-	-	212	*	-	-	234
Kentucky.....	2,700	2,235	-	-	2,235	5,795	-	10	10,740
Louisiana.....	-	11	-	-	11	-	-	-	11
Maine.....	-	-	-	194	194	-	-	-	194

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1998
(Continued)
 (Thousand Short Tons)

Origin State and Destination State	Railroad	Water				Truck	Tramway, Conveyor, and Slurry Pipeline	Unknown	Total
		River	Great Lakes	Tidewater	Total				
Kentucky, Eastern (Continued)									
Maryland.....	*	-	-	349	349	-	-	-	349
Massachusetts.....	206	-	-	37	37	-	-	-	243
Michigan.....	5,977	-	1,398	-	1,398	38	-	-	7,413
Minnesota.....	6	66	17	-	83	*	-	-	89
Mississippi.....	952	25	-	-	25	-	-	-	977
Missouri.....	109	61	-	-	61	*	-	-	170
New York.....	1,709	2	65	-	67	43	-	-	1,818
North Carolina.....	16,847	1	-	-	1	332	-	-	17,179
Ohio.....	1,519	5,909	872	-	6,782	774	-	-	9,074
Oklahoma.....	-	27	-	-	27	-	-	-	27
Oregon.....	14	-	-	-	-	-	-	-	14
Pennsylvania.....	141	511	-	-	511	114	-	-	766
South Carolina.....	13,015	-	-	-	-	44	-	-	13,060
South Dakota.....	-	7	-	-	7	-	-	-	7
Tennessee.....	7,510	856	-	-	856	989	-	-	9,355
Virginia.....	5,267	-	-	-	-	68	-	-	5,336
West Virginia.....	80	8	-	-	8	283	-	-	370
Wisconsin.....	100	171	469	-	639	*	-	-	740
Unknown State.....	-	-	-	-	-	-	-	263	263
Foreign.....	330	-	1,126	4,926	6,052	3	-	-	6,385
Kentucky, Western.....	7,364	16,403	-	601	17,004	8,501	-	7	32,876
Alabama.....	-	1,816	-	-	1,816	-	-	-	1,816
Florida.....	704	1,551	-	-	1,551	-	-	-	2,255
Illinois.....	166	158	-	-	158	-	-	-	324
Indiana.....	105	165	-	-	165	-	-	-	270
Iowa.....	-	504	-	-	504	-	-	-	504
Kentucky.....	2,591	10,035	-	-	10,035	6,325	-	-	18,950
Louisiana.....	-	661	-	-	661	-	-	-	661
Maine.....	-	-	-	55	55	-	-	-	55
Michigan.....	14	-	-	-	-	-	-	-	14
Minnesota.....	-	4	-	-	4	-	-	-	4
Mississippi.....	-	3	-	-	3	-	-	-	3
Missouri.....	-	211	-	-	211	-	-	-	211
New Jersey.....	-	-	-	-	-	26	-	-	26
Tennessee.....	2,559	1,292	-	-	1,292	2,150	-	-	6,000
Virginia.....	1,064	-	-	-	-	*	-	-	1,064
Wisconsin.....	162	1	-	-	1	-	-	-	164
Unknown State.....	-	-	-	-	-	-	-	7	7
Foreign.....	-	-	-	546	546	-	-	-	546
Louisiana.....	-	-	-	-	-	989	2,342	-	3,331
Louisiana.....	-	-	-	-	-	989	2,342	-	3,331
Maryland.....	670	-	-	9	9	3,368	-	19	4,066
Delaware.....	96	-	-	-	-	-	-	-	96
Maryland.....	574	-	-	-	-	335	-	-	909
Pennsylvania.....	-	-	-	-	-	16	-	-	16
Virginia.....	-	-	-	-	-	40	-	-	40
West Virginia.....	-	-	-	-	-	2,978	-	-	2,978
Unknown State.....	-	-	-	-	-	-	-	19	19
Foreign.....	-	-	-	9	9	-	-	-	9
Missouri.....	15	-	-	-	-	281	-	-	296
Arkansas.....	15	-	-	-	-	-	-	-	15
Kansas.....	-	-	-	-	-	1	-	-	1
Missouri.....	-	-	-	-	-	281	-	-	281
Montana.....	25,385	-	6,646	-	6,646	632	10,011	-	42,674
Arizona.....	94	-	-	-	-	-	-	-	94
Illinois.....	1,679	-	-	-	-	-	-	-	1,679
Indiana.....	126	-	-	-	-	-	-	-	126
Iowa.....	136	-	-	-	-	-	-	-	136
Kansas.....	379	-	-	-	-	-	-	-	379
Michigan.....	3,439	-	6,171	-	6,171	251	-	-	9,861
Minnesota.....	10,276	-	171	-	171	30	-	-	10,477
Mississippi.....	2,833	-	-	-	-	-	-	-	2,833

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1998
(Continued)
(Thousand Short Tons)

Origin State and Destination State	Railroad	Water				Truck	Tramway, Conveyor, and Slurry Pipeline	Unknown	Total
		River	Great Lakes	Tidewater	Total				
Montana (Continued)									
Montana	-	-	-	-	-	349	10,011	-	10,360
Nebraska	81	-	-	-	-	-	-	-	81
North Dakota	517	-	-	-	-	-	-	-	517
South Dakota	1,698	-	-	-	-	-	-	-	1,698
Washington	1,503	-	-	-	-	-	-	-	1,503
Wisconsin	2,051	-	-	-	-	2	-	-	2,053
Wyoming	62	-	-	-	-	-	-	-	62
Foreign	511	-	303	-	303	-	-	-	814
New Mexico	21,267	-	-	-	-	9	6,749	*	28,026
Arizona	11,138	-	-	-	-	*	-	-	11,138
Colorado	11	-	-	-	-	-	-	-	11
New Mexico	9,062	-	-	-	-	9	6,749	*	15,819
Oklahoma	119	-	-	-	-	-	-	-	119
Texas	472	-	-	-	-	-	-	-	472
Wisconsin	466	-	-	-	-	-	-	-	466
North Dakota	425	-	-	-	-	4,263	25,869	-	30,557
North Dakota	425	-	-	-	-	4,263	25,869	-	30,557
Ohio	1,281	7,052	204	459	7,716	10,285	7,858	25	27,166
Alabama	-	4	-	-	4	-	-	-	4
Indiana	26	-	-	-	-	66	-	-	93
Kentucky	-	848	-	-	848	-	-	-	848
Michigan	-	-	-	-	-	302	-	-	302
Minnesota	-	-	-	-	-	14	-	-	14
New York	9	-	-	-	-	4	-	-	12
Ohio	1,246	4,403	-	-	4,403	9,584	7,858	-	23,091
Pennsylvania	-	129	-	-	129	316	-	-	445
West Virginia	-	1,669	-	-	1,669	*	-	-	1,670
Wisconsin	-	-	*	-	*	-	-	-	*
Unknown State	-	-	-	-	-	-	-	25	25
Foreign	-	-	204	459	663	-	-	-	663
Oklahoma	119	-	-	-	-	1,604	-	8	1,731
Arkansas	31	-	-	-	-	40	-	-	71
Kansas	-	-	-	-	-	153	-	-	153
Oklahoma	-	-	-	-	-	1,411	-	-	1,411
Texas	88	-	-	-	-	-	-	-	88
Unknown State	-	-	-	-	-	-	-	8	8
Pennsylvania	28,567	14,857	3,645	5,772	24,273	21,799	5,611	274	80,525
Alabama	*	62	-	-	62	*	-	-	62
Arizona	*	-	-	-	-	3	-	-	3
Arkansas	2	-	-	-	-	*	-	-	2
California	*	-	-	-	-	*	-	-	*
Colorado	18	-	-	-	-	*	-	-	18
Connecticut	175	-	-	-	-	8	-	-	183
Delaware	1,172	-	-	-	-	19	25	-	1,217
District of Columbia	-	-	-	-	-	2	-	-	2
Florida	152	65	-	-	65	*	-	-	218
Georgia	2	-	-	-	-	*	-	-	2
Illinois	9	50	-	-	50	1	-	-	61
Indiana	254	36	-	-	36	21	-	-	311
Iowa	35	240	-	-	240	*	-	-	275
Kansas	1	-	-	-	-	-	-	-	1
Kentucky	14	194	-	-	194	10	-	-	218
Louisiana	-	42	-	-	42	*	-	-	42
Maine	7	-	-	-	-	3	-	-	10
Maryland	2,698	-	-	-	-	334	-	-	3,032
Massachusetts	66	-	-	-	-	17	-	-	84
Michigan	3,677	-	348	-	348	1	-	-	4,026
Minnesota	7	-	-	-	-	*	-	-	7
Mississippi	*	-	-	-	-	-	-	-	*
Missouri	*	-	-	-	-	*	-	-	*
Nebraska	11	-	-	-	-	*	-	-	11
New Hampshire	762	-	-	15	15	6	-	-	783

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1998
(Continued)
(Thousand Short Tons)

Origin State and Destination State	Railroad	Water				Truck	Tramway, Conveyor, and Slurry Pipeline	Unknown	Total
		River	Great Lakes	Tidewater	Total				
Pennsylvania (Continued)									
New Jersey.....	534	-	-	-	-	14	-	-	549
New Mexico.....	-	-	-	-	-	*	-	-	*
New York.....	3,923	46	555	-	602	573	-	-	5,098
North Carolina.....	*	-	-	-	-	1	-	-	1
North Dakota.....	-	-	-	-	-	*	-	-	*
Ohio.....	2,041	3,627	244	-	3,872	120	-	-	6,033
Oklahoma.....	*	-	-	-	-	*	-	-	*
Oregon.....	15	-	-	-	-	-	-	-	15
Pennsylvania.....	11,378	5,484	-	-	5,484	20,137	4,915	3	41,917
Rhode Island.....	-	-	-	-	-	2	-	-	2
South Carolina.....	53	-	-	-	-	1	-	-	54
Tennessee.....	*	689	-	-	689	12	-	-	701
Texas.....	2	3	-	-	3	2	-	-	7
Utah.....	153	-	-	-	-	-	-	-	153
Vermont.....	-	-	-	-	-	2	-	-	2
Virginia.....	80	-	-	-	-	325	-	-	405
West Virginia.....	85	3,758	-	-	3,758	179	671	-	4,693
Wisconsin.....	886	9	1,251	-	1,261	1	-	-	2,147
Wyoming.....	*	-	-	-	-	-	-	-	*
Unknown State.....	-	-	-	-	-	-	-	271	271
Foreign.....	352	550	1,245	5,757	7,553	4	-	-	7,908
Pennsylvania Anthracite.....	606	19	-	153	171	4,088	-	22	4,887
Alabama.....	*	11	-	-	11	*	-	-	11
Arizona.....	*	-	-	-	-	3	-	-	3
Arkansas.....	2	-	-	-	-	*	-	-	2
California.....	*	-	-	-	-	*	-	-	*
Colorado.....	18	-	-	-	-	*	-	-	18
Connecticut.....	*	-	-	-	-	7	-	-	7
Delaware.....	*	-	-	-	-	7	-	-	7
District of Columbia.....	-	-	-	-	-	*	-	-	*
Florida.....	4	-	-	-	-	*	-	-	4
Georgia.....	2	-	-	-	-	*	-	-	2
Illinois.....	9	-	-	-	-	1	-	-	11
Indiana.....	*	-	-	-	-	15	-	-	15
Iowa.....	35	-	-	-	-	*	-	-	35
Kansas.....	1	-	-	-	-	-	-	-	1
Kentucky.....	13	-	-	-	-	10	-	-	23
Louisiana.....	-	-	-	-	-	*	-	-	*
Maine.....	*	-	-	-	-	3	-	-	3
Maryland.....	*	-	-	-	-	2	-	-	2
Massachusetts.....	1	-	-	-	-	9	-	-	10
Michigan.....	*	-	-	-	-	1	-	-	1
Minnesota.....	7	-	-	-	-	*	-	-	7
Mississippi.....	*	-	-	-	-	-	-	-	*
Missouri.....	*	-	-	-	-	*	-	-	*
Nebraska.....	11	-	-	-	-	*	-	-	11
New Hampshire.....	*	-	-	-	-	5	-	-	5
New Jersey.....	*	-	-	-	-	14	-	-	14
New Mexico.....	-	-	-	-	-	*	-	-	*
New York.....	15	-	-	-	-	77	-	-	92
North Carolina.....	*	-	-	-	-	1	-	-	1
North Dakota.....	-	-	-	-	-	*	-	-	*
Ohio.....	*	-	-	-	-	11	-	-	11
Oklahoma.....	*	-	-	-	-	*	-	-	*
Oregon.....	15	-	-	-	-	-	-	-	15
Pennsylvania.....	124	-	-	-	-	3,853	-	2	3,980
Rhode Island.....	-	-	-	-	-	2	-	-	2
South Carolina.....	53	-	-	-	-	1	-	-	54
Tennessee.....	*	5	-	-	5	12	-	-	16
Texas.....	2	3	-	-	3	2	-	-	7
Utah.....	*	-	-	-	-	-	-	-	*
Vermont.....	-	-	-	-	-	2	-	-	2
Virginia.....	*	-	-	-	-	3	-	-	3
West Virginia.....	*	-	-	-	-	42	-	-	42
Wisconsin.....	5	-	-	-	-	1	-	-	6
Wyoming.....	*	-	-	-	-	-	-	-	*
Unknown State.....	-	-	-	-	-	-	-	19	19

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1998
(Continued)
(Thousand Short Tons)

Origin State and Destination State	Railroad	Water				Truck	Tramway, Conveyor, and Slurry Pipeline	Unknown	Total
		River	Great Lakes	Tidewater	Total				
Pennsylvania Anthracite (Continued)									
Foreign.....	287	-	-	153	153	3	-	-	443
Pennsylvania Bituminous.....	27,961	14,838	3,645	5,619	24,102	17,711	5,611	253	75,637
Alabama.....	-	51	-	-	51	-	-	-	51
Connecticut.....	175	-	-	-	-	1	-	-	176
Delaware.....	1,172	-	-	-	-	12	25	-	1,210
District of Columbia.....	-	-	-	-	-	2	-	-	2
Florida.....	148	65	-	-	65	-	-	-	213
Illinois.....	-	50	-	-	50	-	-	-	50
Indiana.....	254	36	-	-	36	6	-	-	296
Iowa.....	-	240	-	-	240	-	-	-	240
Kentucky.....	2	194	-	-	194	-	-	-	196
Louisiana.....	-	42	-	-	42	-	-	-	42
Maine.....	7	-	-	-	-	-	-	-	7
Maryland.....	2,698	-	-	-	-	331	-	-	3,029
Massachusetts.....	66	-	-	-	-	8	-	-	74
Michigan.....	3,677	-	348	-	348	-	-	-	4,025
New Hampshire.....	762	-	-	15	15	1	-	-	778
New Jersey.....	534	-	-	-	-	-	-	-	534
New York.....	3,908	46	555	-	602	496	-	-	5,006
Ohio.....	2,040	3,627	244	-	3,872	109	-	-	6,021
Pennsylvania.....	11,254	5,484	-	-	5,484	16,284	4,915	1	37,937
Tennessee.....	-	684	-	-	684	-	-	-	684
Texas.....	-	-	-	-	-	*	-	-	*
Utah.....	153	-	-	-	-	-	-	-	153
Virginia.....	80	-	-	-	-	322	-	-	402
West Virginia.....	85	3,758	-	-	3,758	137	671	-	4,651
Wisconsin.....	881	9	1,251	-	1,261	-	-	-	2,141
Unknown State.....	-	-	-	-	-	-	-	252	252
Foreign.....	65	550	1,245	5,604	7,400	1	-	-	7,466
Tennessee.....	1,821	3	-	-	3	915	-	1	2,741
Alabama.....	5	-	-	-	-	-	-	-	5
Florida.....	209	-	-	-	-	-	-	-	209
Georgia.....	670	-	-	-	-	23	-	-	693
Kentucky.....	-	-	-	-	-	7	-	-	7
North Carolina.....	22	-	-	-	-	*	-	-	22
South Carolina.....	381	-	-	-	-	-	-	-	381
Tennessee.....	534	3	-	-	3	885	-	-	1,422
Unknown State.....	-	-	-	-	-	-	-	1	1
Texas.....	23,344	-	-	20	20	14,484	15,087	-	52,935
Louisiana.....	-	-	-	-	-	144	-	-	144
Texas.....	23,342	-	-	-	-	14,340	15,087	-	52,769
Foreign.....	2	-	-	20	20	-	-	-	22
Utah.....	14,328	654	-	2,569	3,223	5,817	3,367	30	26,765
California.....	4,695	-	-	-	-	16	-	-	4,711
Colorado.....	*	-	-	-	-	3	-	-	3
Hawaii.....	-	-	-	34	34	-	-	-	34
Idaho.....	66	-	-	-	-	55	-	-	121
Illinois.....	2,266	-	-	-	-	-	-	-	2,266
Kansas.....	-	-	-	-	-	*	-	-	*
Missouri.....	10	-	-	-	-	-	-	-	10
Montana.....	-	-	-	-	-	3	-	-	3
Nevada.....	3,026	-	-	-	-	393	12	-	3,431
Oregon.....	-	-	-	-	-	1	-	-	1
Pennsylvania.....	-	-	-	-	-	*	-	-	*
Tennessee.....	343	654	-	-	654	-	-	-	996
Utah.....	3,839	-	-	-	-	5,337	3,355	-	12,531
Washington.....	84	-	-	-	-	8	-	-	92
Unknown State.....	-	-	-	-	-	-	-	30	30
Foreign.....	-	-	-	2,535	2,535	-	-	-	2,535
Virginia.....	15,662	1,517	348	12,792	14,656	2,053	963	204	33,539

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1998
(Continued)
(Thousand Short Tons)

Origin State and Destination State	Railroad	Water				Truck	Tramway, Conveyor, and Slurry Pipeline	Unknown	Total
		River	Great Lakes	Tidewater	Total				
Virginia (Continued)									
Alabama	857	-	-	-	-	-	-	-	857
Delaware	146	-	-	-	-	-	-	-	146
Florida	866	-	-	-	-	-	-	-	866
Georgia	2,893	-	-	-	-	-	-	-	2,893
Illinois	176	-	-	-	-	-	-	-	176
Indiana	664	862	-	-	862	*	-	-	1,526
Kentucky	-	*	-	-	*	2	-	-	3
Maryland	-	-	-	-	-	*	-	-	*
Massachusetts	-	-	-	1	1	-	-	-	1
Michigan	-	-	-	-	-	*	-	-	*
Mississippi	18	-	-	-	-	-	-	-	18
New Jersey	-	-	-	700	700	*	-	-	700
New York	4	-	-	-	-	-	-	-	4
North Carolina	670	-	-	-	-	65	-	-	735
Ohio	283	577	-	-	577	-	-	-	861
Oklahoma	-	19	-	-	19	-	-	-	19
Pennsylvania	159	44	-	-	44	*	-	-	204
South Carolina	1,341	-	-	-	-	1	-	-	1,342
Tennessee	2,217	1	-	-	1	42	-	-	2,260
Texas	21	-	-	-	-	-	-	-	21
Utah	27	-	-	-	-	-	-	-	27
Virginia	4,917	-	-	-	-	1,571	963	152	7,602
West Virginia	402	13	-	-	13	*	-	-	415
Unknown State	-	-	-	-	-	-	-	53	53
Foreign	-	-	348	12,091	12,439	372	-	-	12,810
Washington	-	-	-	-	-	-	4,622	-	4,622
Washington	-	-	-	-	-	-	4,622	-	4,622
West Virginia	67,528	50,607	8,672	35,130	94,409	7,083	3,145	448	172,612
Alabama	1,748	915	-	-	915	*	-	-	2,664
Connecticut	-	-	-	742	742	1	-	-	743
Delaware	883	-	-	-	-	6	-	-	889
District of Columbia	3	3	-	-	3	-	-	-	6
Florida	867	119	-	1,171	1,290	77	-	-	2,233
Georgia	4,767	-	-	-	-	15	-	-	4,782
Idaho	20	-	-	-	-	-	-	-	20
Illinois	960	565	317	-	882	-	-	-	1,841
Indiana	5,441	901	-	-	901	26	-	-	6,368
Iowa	25	135	-	-	135	*	-	-	160
Kentucky	2,192	5,835	-	-	5,835	170	-	-	8,197
Louisiana	-	128	-	-	128	-	-	-	128
Maryland	5,008	-	-	972	972	901	-	-	6,881
Massachusetts	825	6	-	1,639	1,644	1	-	-	2,470
Michigan	4,673	3	1,177	-	1,181	-	-	-	5,854
Minnesota	-	116	-	-	116	-	-	-	116
Mississippi	22	17	-	-	17	-	-	-	38
Missouri	-	57	-	-	57	-	-	-	57
Nebraska	5	-	-	-	-	-	-	-	5
Nevada	-	36	-	-	36	-	-	-	36
New Hampshire	216	-	-	-	-	-	-	-	216
New Jersey	980	95	-	602	697	-	-	-	1,677
New York	4,876	239	50	330	618	1	-	-	5,495
North Carolina	9,597	-	-	178	178	5	-	-	9,780
Ohio	4,071	17,352	303	-	17,655	418	-	-	22,144
Oklahoma	32	89	-	-	89	-	-	-	121
Pennsylvania	3,497	12,324	-	12	12,336	394	8	-	16,234
South Carolina	815	-	-	-	-	*	-	-	815
Tennessee	8	364	-	-	364	6	-	-	378
Texas	-	1	-	-	1	-	-	-	1
Utah	125	-	-	-	-	-	-	-	125
Vermont	-	-	-	-	-	*	-	-	*
Virginia	4,419	-	-	-	-	796	75	-	5,291
West Virginia	10,172	10,959	-	-	10,959	4,255	3,061	3	28,451
Wisconsin	10	1	409	-	410	-	-	-	420
Unknown State	-	-	-	-	-	-	-	446	446

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1998
(Continued)
(Thousand Short Tons)

Origin State and Destination State	Railroad	Water				Truck	Tramway, Conveyer, and Slurry Pipeline	Unknown	Total
		River	Great Lakes	Tidewater	Total				
West Virginia (Continued)									
Foreign.....	1,269	349	6,415	29,485	36,249	12	-	-	37,531
West Virginia, Northern	15,184	15,863	1,923	3,995	21,782	4,847	2,862	110	44,784
Alabama	-	396	-	-	396	-	-	-	396
Connecticut.....	-	-	-	666	666	*	-	-	667
Delaware.....	507	-	-	-	-	6	-	-	513
Florida.....	631	-	-	-	-	33	-	-	664
Illinois.....	-	88	-	-	88	-	-	-	88
Indiana.....	454	6	-	-	6	26	-	-	485
Kentucky.....	7	1,199	-	-	1,199	-	-	-	1,206
Louisiana.....	-	101	-	-	101	-	-	-	101
Maryland.....	3,245	-	-	-	-	901	-	-	4,146
Massachusetts.....	33	6	-	-	6	1	-	-	40
Michigan.....	632	-	72	-	72	-	-	-	704
Missouri.....	-	34	-	-	34	-	-	-	34
New Hampshire.....	208	-	-	-	-	-	-	-	208
New Jersey.....	940	70	-	454	523	-	-	-	1,463
New York.....	4,017	-	1	-	1	1	-	-	4,018
Ohio.....	2,139	2,481	-	-	2,481	9	-	-	4,630
Pennsylvania.....	1,929	6,845	-	-	6,845	144	-	-	8,918
Texas.....	-	1	-	-	1	-	-	-	1
Virginia.....	62	-	-	-	-	677	-	-	738
West Virginia.....	372	4,637	-	-	4,637	3,050	2,862	-	10,921
Wisconsin.....	-	-	360	-	360	-	-	-	360
Unknown State.....	-	-	-	-	-	-	-	110	110
Foreign.....	8	-	1,491	2,875	4,365	-	-	-	4,374
West Virginia, Southern	52,344	34,744	6,748	31,135	72,627	2,236	283	339	127,828
Alabama.....	1,748	519	-	-	519	*	-	-	2,268
Connecticut.....	-	-	-	76	76	*	-	-	76
Delaware.....	376	-	-	-	-	-	-	-	376
District of Columbia.....	3	3	-	-	3	-	-	-	6
Florida.....	236	119	-	1,171	1,290	44	-	-	1,570
Georgia.....	4,767	-	-	-	-	15	-	-	4,782
Idaho.....	20	-	-	-	-	-	-	-	20
Illinois.....	960	477	317	-	794	-	-	-	1,753
Indiana.....	4,987	895	-	-	895	-	-	-	5,882
Iowa.....	25	135	-	-	135	*	-	-	160
Kentucky.....	2,185	4,636	-	-	4,636	170	-	-	6,991
Louisiana.....	-	27	-	-	27	-	-	-	27
Maryland.....	1,763	-	-	972	972	-	-	-	2,735
Massachusetts.....	792	-	-	1,639	1,639	-	-	-	2,430
Michigan.....	4,041	3	1,105	-	1,109	-	-	-	5,150
Minnesota.....	-	116	-	-	116	-	-	-	116
Mississippi.....	22	17	-	-	17	-	-	-	38
Missouri.....	-	23	-	-	23	-	-	-	23
Nebraska.....	5	-	-	-	-	-	-	-	5
Nevada.....	-	36	-	-	36	-	-	-	36
New Hampshire.....	8	-	-	-	-	-	-	-	8
New Jersey.....	40	25	-	148	173	-	-	-	214
New York.....	859	239	49	330	618	-	-	-	1,477
North Carolina.....	9,597	-	-	178	178	5	-	-	9,780
Ohio.....	1,931	14,871	303	-	15,174	409	-	-	17,514
Oklahoma.....	32	89	-	-	89	-	-	-	121
Pennsylvania.....	1,568	5,478	-	12	5,490	249	8	-	7,315
South Carolina.....	815	-	-	-	-	*	-	-	815
Tennessee.....	8	364	-	-	364	6	-	-	378
Utah.....	125	-	-	-	-	-	-	-	125
Vermont.....	-	-	-	-	-	*	-	-	*
Virginia.....	4,357	-	-	-	-	120	75	-	4,552
West Virginia.....	9,800	6,322	-	-	6,322	1,205	199	3	17,529
Wisconsin.....	10	1	49	-	50	-	-	-	60
Unknown State.....	-	-	-	-	-	-	-	336	336
Foreign.....	1,261	349	4,925	26,610	31,884	12	-	-	33,157
Wyoming.....	272,809	16,437	7,398	2,266	26,100	4,085	11,869	28	314,891

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1998
(Continued)
(Thousand Short Tons)

Origin State and Destination State	Railroad	Water				Truck	Tramway, Conveyor, and Slurry Pipeline	Unknown	Total
		River	Great Lakes	Tidewater	Total				
Wyoming (Continued)									
Alabama.....	6,017	-	-	-	-	-	-	-	6,017
Arizona.....	368	-	-	-	-	-	-	-	368
Arkansas.....	13,353	-	-	-	-	-	-	-	13,353
Colorado.....	8,071	-	-	-	-	61	-	-	8,132
Connecticut.....	33	-	-	-	-	-	-	-	33
Florida.....	1,064	-	-	-	-	-	-	-	1,064
Georgia.....	5,950	-	-	-	-	-	-	-	5,950
Idaho.....	360	-	-	-	-	31	-	-	392
Illinois.....	13,656	7,210	-	-	7,210	-	-	-	20,866
Indiana.....	8,010	9,206	66	-	9,272	-	-	-	17,282
Iowa.....	20,690	-	-	-	-	-	-	-	20,690
Kansas.....	14,373	-	-	-	-	-	-	-	14,373
Louisiana.....	10,346	-	-	-	-	-	-	-	10,346
Michigan.....	11,936	-	-	-	-	-	-	-	11,936
Minnesota.....	7,626	-	904	-	904	38	-	-	8,568
Mississippi.....	-	-	-	468	468	-	-	-	468
Missouri.....	38,358	-	-	-	-	-	-	-	38,358
Montana.....	456	-	-	-	-	*	-	-	457
Nebraska.....	11,661	-	-	-	-	*	-	-	11,661
North Dakota.....	65	-	-	-	-	-	-	-	65
Ohio.....	2,414	21	-	-	21	-	-	-	2,435
Oklahoma.....	19,258	-	-	-	-	-	-	-	19,258
Oregon.....	2,062	-	-	-	-	-	-	-	2,062
South Dakota.....	-	-	-	-	-	430	-	-	430
Tennessee.....	3,750	-	-	-	-	-	-	-	3,750
Texas.....	45,089	-	-	-	-	-	-	-	45,089
Utah.....	-	-	-	-	-	*	-	-	*
Virginia.....	55	-	-	-	-	-	-	-	55
Washington.....	1	-	-	-	-	-	-	-	1
Wisconsin.....	15,426	-	4,530	-	4,530	-	-	-	19,956
Wyoming.....	12,325	-	-	-	-	3,525	11,869	-	27,719
Unknown State.....	-	-	-	-	-	-	-	28	28
Foreign.....	34	-	1,897	1,798	3,695	-	-	-	3,729
U.S. Total.....	652,211	138,472	31,213	72,971	242,657	123,391	102,749	1,413	1,122,421
Alabama.....	18,744	7,684	-	-	7,684	5,102	-	-	31,530
Alaska.....	606	-	-	-	-	364	-	-	970
Arizona.....	19,748	-	-	-	-	3	-	-	19,751
Arkansas.....	13,481	-	-	-	-	55	-	-	13,536
California.....	4,773	-	-	-	-	16	-	-	4,789
Colorado.....	15,473	-	-	-	-	4,683	-	2	20,158
Connecticut.....	248	-	-	1,162	1,162	8	-	-	1,418
Delaware.....	2,390	-	-	-	-	25	25	-	2,440
District of Columbia.....	3	3	-	-	3	2	-	-	8
Florida.....	17,534	7,367	-	2,061	9,428	116	-	-	27,078
Georgia.....	31,385	-	-	-	-	191	-	-	31,576
Hawaii.....	-	-	-	34	34	-	-	-	34
Idaho.....	447	-	-	-	-	87	-	-	533
Illinois.....	33,127	9,415	317	-	9,732	5,953	27	-	48,838
Indiana.....	42,121	12,711	66	-	12,776	10,257	739	-	65,893
Iowa.....	21,610	2,012	-	-	2,012	181	-	-	23,803
Kansas.....	16,082	-	-	-	-	520	-	-	16,601
Kentucky.....	10,134	19,726	-	-	19,726	12,834	-	10	42,704
Louisiana.....	10,346	1,954	-	-	1,954	1,133	2,342	-	15,776
Maine.....	7	-	-	249	249	3	-	-	258
Maryland.....	8,280	-	-	1,320	1,320	1,571	-	-	11,171
Massachusetts.....	1,097	6	-	1,677	1,683	18	-	-	2,798
Michigan.....	29,717	3	9,419	-	9,422	592	-	-	39,731
Minnesota.....	18,070	203	1,093	-	1,296	81	-	-	19,447
Mississippi.....	3,825	946	-	1,104	2,051	73	-	-	5,949
Missouri.....	39,963	853	-	-	853	1,203	-	-	42,019
Montana.....	462	-	-	-	-	353	10,011	-	10,825
Nebraska.....	11,855	-	-	-	-	*	-	-	11,855
Nevada.....	3,046	36	-	-	36	393	4,501	-	7,976
New Hampshire.....	979	-	-	15	15	6	-	-	1,000
New Jersey.....	1,514	95	-	1,302	1,397	41	-	-	2,952
New Mexico.....	9,062	-	-	-	-	139	6,749	*	15,950

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1998
(Continued)
(Thousand Short Tons)

Origin State and Destination State	Railroad	Water				Truck	Tramway, Conveyor, and Slurry Pipeline	Unknown	Total
		River	Great Lakes	Tidewater	Total				
U.S. Total (Continued)									
New York	10,521	287	670	330	1,287	619	-	-	12,427
North Carolina	27,135	1	-	178	179	403	-	-	27,717
North Dakota	1,007	-	-	-	-	4,263	25,869	-	31,139
Ohio	11,574	31,899	1,420	-	33,319	10,895	7,858	-	63,646
Oklahoma	19,410	136	-	-	136	1,411	-	-	20,957
Oregon	2,091	-	-	-	-	1	-	-	2,092
Pennsylvania	15,175	18,492	-	12	18,504	20,978	4,923	3	59,582
Rhode Island	-	-	-	-	-	2	-	-	2
South Carolina	15,605	-	-	-	-	46	-	-	15,651
South Dakota	1,698	7	-	-	7	430	-	-	2,135
Tennessee	19,316	6,336	-	-	6,336	4,083	-	-	29,735
Texas	72,323	4	-	-	4	14,345	15,087	-	101,759
Utah	6,382	-	-	-	-	5,337	3,355	-	15,074
Vermont	-	-	-	-	-	2	-	-	2
Virginia	15,802	-	-	-	-	2,801	1,038	152	19,792
Washington	1,594	-	-	-	-	8	4,622	-	6,224
West Virginia	10,739	16,406	-	-	16,406	7,696	3,733	3	38,576
Wisconsin	19,495	992	6,690	-	7,682	3	-	-	27,180
Wyoming	12,387	-	-	-	-	3,674	11,869	-	27,930
Unknown State	-	-	-	-	-	-	-	1,244	1,244
Foreign	3,829	899	11,539	63,527	75,966	391	-	-	80,185

* Data round to zero.

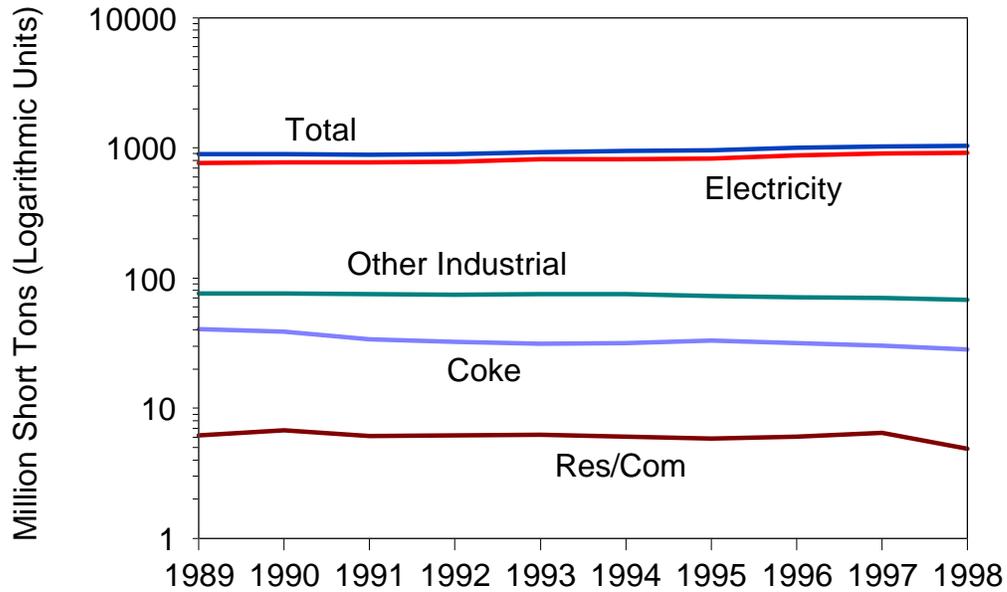
Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, Form EIA-6A, "Coal Distribution Report."

Demand

Domestic Markets

Figure 9. U.S. Coal Consumption, 1989-1998



Note: Total consumption does not include coal consumed by other power producers.

Sources: Energy Information Administration, • Electric Utilities: Form EIA-759, "Monthly Power Plant Report." • Coke Plants: Form EIA-5, "Coke Plant Report - Quarterly." • Other Industrial: Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants" and Form EIA-6, "Coal Distribution Report." • Residential and Commercial: Form EIA-6, "Coal Distribution Report."

Table 66. Major U.S. Coal Consumers, 1998

Rank	Company Name	Plant Locations
Electric Utilities		
1	Tennessee Valley Authority	(AL) (KY) (TN)
2	Texas Utilities Electric Company	(TX)
3	Pacificorp	(UT) (WA) (WY)
4	Georgia Power Company	(GA)
5	Alabama Power Company	(AL)
6	Detroit Edison Company (The)	(MI)
7	Houston Lighting & Power Company	(TX)
8	GPU Service Corporation	(PA)
9	Union Electric Company	(MO)
10	Basin Electric Power	(ND) (WY)
11	Duke Power Company	(NC) (SC)
12	Ohio Power Company	(OH) (WV)
13	PSI Energy, Inc	(IN)
14	Commonwealth Edison Company	(IL)
15	Virginia Electric & Power Company	(VA) (WV)
16	Northern States Power Company	(MN) (WI)
17	Appalachian Power Company	(VA) (WV)
18	Monongahela Power Company	(WV)
19	Midamerican Energy	(IA)
20	Southwestern Electric Power Company	(AR) (TX)
21	Arkansas Power & Light Company	(AR)
22	Indiana Michigan Power Company	(IN)
23	Arizona Public Service Company	(AZ) (NM)
24	Carolina Power & Light Company	(NC) (SC)
25	Cincinnati Gas Electric Company	(KY) (OH)
26	Kansas City Power & Light Company	(KS) (MO)
27	Montana Power Company	(MT)
28	Wisconsin Electric Power Company	(MI) (WI)
29	Public Service Company of Colorado	(CO)
30	Salt River Project	(AZ)
31	Oklahoma Gas & Electric Company	(OK)
32	KPL - Western Resources	(KS)
33	Southwestern Public Service Company	(TX)
34	Associated Electric Coop	(MO)
35	Northern Indiana Public Service Company	(IN)
36	Pennsylvania Power & Light Company	(PA)
37	Wisconsin Power & Light Company	(WI)
38	Dayton Power & Light Company (The)	(OH)
39	Consumers Power Company	(MI)
40	Illinois Power Company	(IL)
41	Tampa Electric Company	(FL)
42	Indianapolis Power & Light Company	(IN)
43	Kentucky Utilities Company	(KY)
44	Cooperative Power Association	(ND)
45	Ohio Edison Company	(OH)
46	Public Service Company of New Mexico	(NM)
47	Pennsylvania Power Company	(PA)
48	Louisville Gas & Electric Company	(KY)
49	Potomac Electric Power Company	(MD) (VA)
50	Cajun Elec Power Coop Inc	(LA)
51	Nebraska Public Power Distribution	(NE)
52	South Carolina Public Service Authority	(SC)
53	Scana Corporation	(SC)
54	Florida Power Corporation	(FL)
55	Central Illinois Public Service Company	(IL)
56	San Antonio Public Service Board	(TX)
57	Central Louisiana Electric Company	(LA)
58	Los Angeles (City of)	(UT)
59	Baltimore Gas & Electric Company	(MD)
60	West Penn Power Company	(PA)
61	I E S Utilities Company	(IA)
62	Lower Colorado River Authority	(TX)
63	Electric Energy Inc	(IL)
64	Tri-State G & T Association Inc	(CO)
65	Mississippi Power Company	(MS)
66	Omaha Public Power District	(NE)
67	Southern California Edison Company	(NV)
68	Indiana-Kentucky Electric Corporation	(IN)
69	Columbus Southern Power Company	(OH)
70	Cleveland Elec Illumination Company	(OH)
71	Minnesota Power Inc	(MN)
72	Cardinal Operating Company	(OH)
73	Minnkota Power Coop Inc	(ND)

See footnotes at end of table.

Table 66. Major U.S. Coal Consumers, 1998 (Continued)

Company Name	Plant Location
Top Ten Manufacturers	
Aluminum Company of America	(IN) (OH) (TN) (TX)
Archer Daniels Midland	(IA) (IL) (MN)
Champion International Corp	(AL) (FL) (ME) (MI) (MN) (NC) (NY) (OH)
Dakota Gasification Co	(ND)
E I Du Pont De Nemours & Co	(DE) (MS) (NC) (SC) (TN) (VA) (WV)
Eastman Chemical Company	(AR) (NY) (SC) (TN) (TX)
Hoechst AG	(SC) (TX) (VA)
Holnam Inc	(AL) (CO) (IA) (MI) (MO) (MS) (SC) (UT) (WA)
Inland Steel Industries Inc	(IN)
Westvaco Corporation	(MD) (PA) (SD) (VA)
Other Major Manufacturers	
A E Staley Manufacturing Co	(IL) (IN) (TN)
American Crystal Sugar Co	(MN) (ND)
Applied Energy Services Inc	(PA)
Ash Grove Cement Company	(AR) (KS) (MT) (NE) (OR) (TX) (UT)
Blue Circle Inc	(AL) (GA) (NY) (OK) (SC)
Cargill Incorporated	(GA) (IA) (MI) (MN) (NC) (OH) (TN) (VA)
Consolidated Papers Inc	(WI)
Dravo Corporation	(AL) (KY)
Elkem A/S	(OH) (WV)
Florida Crushed Stone	(FL)
Fort James Corporation	(GA) (OK) (WI)
FMC Corporation	(NC) (WV) (WY)
General Chemical Corporation	(WY)
General Motors Corporation	(AL) (IL) (IN) (MI) (MO) (OH) (WI)
Georgia-Pacific Corp	(AR) (GA) (MI) (VA)
International Paper Company	(AL) (LA) (PA) (SC) (WI)
Jefferson Smurfit Corp	(AL) (FL) (IL) (IN) (OH) (PA)
Kerr-McGee Corporation	(CA)
Kimberly Clark Corporation	(AL) (MI) (PA) (WI)
Lafarge Corporation	(IA) (IL) (KS) (MI) (MO) (PA)
Lone Star Industries, Inc	(FL) (IL) (IN) (MO) (OK) (TX)
Mead Corporation	(MI) (OH) (TN)
Monsanto Company	(AL) (IA) (ID) (IL) (MA) (WV)
P H Glatfelter Co	(NC) (PA)
PPG Industries Inc	(WV)
Societe Des Ciments Francais	(IN) (MD) (PA)
Solvay Minerals, Inc.	(OH) (TN) (WY)
Southdown Inc	(CA) (CO) (FL) (OH) (TN)
Stone Container Corporation	(AZ) (FL) (MI) (SC) (VA)
Union Camp Corporation	(AL) (GA) (SC) (VA)
Top Ten Coke Producers	
AK Steel Corp	(KY) (OH)
Bethlehem Steel Corp	(IN) (MD) (NY) (PA)
Citizens Gas & Coke Utility	(IN)
Drummond Company Inc	(AL)
Indiana Harbor Coke Co, LP	(IN)
LTV Steel Company Inc	(IL) (IN) (OH) (PA)
National Steel Corp.	(IL) (MI)
Sun Coal Co	(VA)
USX Corporation	(IN) (PA)
Wheeling Pittsburgh Steel Corp	(WV)

Note: Major electric utility coal consumers are companies that consumed more than 4.13 million short tons of coal in 1998. Major manufacturers are the top 40 coal consumers in the manufacturing sector. Major coke producers are the top 10 coal consumers in the coke plant sector. Electric utilities are ranked by consumption and manufacturers and coke producers are listed in alphabetical order.

Sources: Energy Information Administration, • Electric Utilities: Form EIA-759, "Monthly Power Plant Report." • Manufacturers: Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants." • Coke Plants: Form EIA-5, "Coke Plant Report - Quarterly."

Table 67. Coal Consumption by Census Division and State, 1989, 1994-1998
(Thousand Short Tons)

Census Division and State	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
New England	5,507	7,860	7,024	6,662	6,553	7,021	-29.9	-4.3	-2.7
Connecticut.....	596	1,065	931	906	862	890	-44.0	-8.8	-4.3
Maine.....	141	194	234	282	464	271	-27.0	-25.7	-7.0
Massachusetts.....	3,189	4,891	4,477	4,113	3,932	4,641	-34.8	-5.1	-4.1
New Hampshire.....	1,469	1,705	1,377	1,355	1,287	1,183	-13.8	3.4	2.4
Rhode Island.....	2	3	3	3	3	27	-25.5	-10.1	-24.6
Vermont.....	109	2	2	3	5	9	NM	117.9	32.7
Middle Atlantic	69,289	73,177	70,965	68,462	67,536	76,177	-5.3	.6	-1.0
New Jersey.....	2,372	2,867	2,402	2,074	1,969	3,545	-17.3	4.8	-4.4
New York.....	12,379	11,719	11,337	11,062	11,474	14,105	5.6	1.9	-1.4
Pennsylvania.....	54,538	58,591	57,226	55,326	54,094	58,526	-6.9	.2	-8
East North Central	234,068	233,976	229,000	217,702	213,188	205,586	*	2.4	1.4
Illinois.....	44,630	47,621	44,431	39,623	39,077	32,374	-6.3	3.4	3.6
Indiana.....	66,296	66,042	64,021	62,631	59,996	57,388	.4	2.5	1.6
Michigan.....	38,084	35,888	36,694	35,802	35,674	34,885	6.1	1.6	1.0
Ohio.....	60,338	58,933	59,835	56,580	56,711	61,016	2.4	1.6	-1.1
Wisconsin.....	24,720	25,491	24,019	23,066	21,731	19,922	-3.0	3.3	2.4
West North Central	144,431	138,156	136,643	131,028	125,591	114,245	4.5	3.5	2.6
Iowa.....	23,351	21,720	21,171	20,636	19,341	17,126	7.5	2.8	3.5
Kansas.....	17,736	17,673	19,084	16,521	17,158	14,963	.3	.8	1.9
Minnesota.....	19,586	19,086	19,264	18,947	18,729	18,279	2.6	1.1	.8
Missouri.....	38,589	36,665	34,382	31,753	27,663	26,348	5.2	8.7	4.3
Nebraska.....	11,792	11,211	10,379	10,396	9,300	7,587	5.2	6.1	5.0
North Dakota.....	31,060	29,360	30,511	30,237	30,363	27,401	5.8	.6	1.4
South Dakota.....	2,316	2,442	1,852	2,537	3,036	2,541	-5.1	-6.5	-1.0
South Atlantic	173,154	170,697	165,545	155,259	151,935	153,008	1.4	3.3	1.4
Delaware.....	1,773	1,866	1,956	2,011	2,226	2,357	-4.9	-5.5	-3.1
District of Columbia.....	6	40	23	6	47	60	-84.7	-39.8	-22.4
Florida.....	28,827	28,719	28,443	26,526	26,082	25,447	.4	2.5	1.4
Georgia.....	32,701	32,693	31,158	31,288	29,254	27,918	*	2.8	1.8
Maryland.....	11,789	11,262	11,366	11,198	10,491	11,541	4.7	2.9	.2
North Carolina.....	28,917	29,608	27,624	24,084	23,282	22,239	-2.3	5.6	3.0
South Carolina.....	14,649	14,111	13,852	12,279	12,993	11,981	3.8	3.0	2.3
Virginia.....	15,843	15,276	14,983	13,378	12,792	14,279	3.7	5.5	1.2
West Virginia.....	38,649	37,122	36,139	34,489	34,767	37,186	4.1	2.7	.4
East South Central	108,388	113,137	110,450	105,830	99,289	87,655	-4.2	2.2	2.4
Alabama.....	36,448	36,433	37,052	34,309	31,473	27,537	*	3.7	3.2
Kentucky.....	39,235	42,228	40,863	39,516	38,090	32,792	-7.1	.7	2.0
Mississippi.....	5,897	6,273	5,791	4,606	4,285	3,831	-6.0	8.3	4.9
Tennessee.....	26,808	28,203	26,744	27,399	25,440	23,496	-4.9	1.3	1.5
West South Central	147,470	150,348	146,472	139,106	138,251	130,093	-1.9	1.6	1.4
Arkansas.....	14,563	14,069	14,816	13,540	12,596	11,547	3.5	3.7	2.6
Louisiana.....	13,891	13,874	12,534	13,357	14,100	12,471	.1	-4	1.2
Oklahoma.....	19,585	21,109	20,125	19,596	17,726	15,086	-7.2	2.5	2.9
Texas.....	99,430	101,297	98,997	92,612	93,829	90,989	-1.8	1.5	1.0
Mountain	117,745	111,389	107,226	107,923	115,695	106,212	5.7	.4	1.1
Arizona.....	19,014	18,205	16,792	16,682	19,580	16,871	4.4	-7	1.3
Colorado.....	18,033	17,960	17,222	16,971	17,475	16,393	.4	.8	1.1
Idaho.....	479	361	397	465	534	533	32.8	-2.7	-1.2
Montana.....	10,724	9,517	8,032	10,005	11,089	10,458	12.7	-8	.3
Nevada.....	8,170	7,440	7,604	7,340	7,968	7,667	9.8	.6	.7
New Mexico.....	15,963	15,887	15,297	15,221	15,374	15,295	.5	.9	.5
Utah.....	16,600	15,923	15,237	15,307	16,216	15,044	4.2	.6	1.1
Wyoming.....	28,763	26,096	26,646	25,933	27,459	23,952	10.2	1.2	2.0
Pacific	11,979	8,885	10,008	8,908	12,162	9,120	34.8	-4	3.1
Alaska.....	693	740	706	815	796	299	-6.3	-3.4	9.8
California.....	2,803	2,134	2,317	2,618	2,498	2,551	31.3	2.9	1.0
Hawaii.....	167	145	169	192	86	32	15.2	18.2	20.1
Oregon.....	2,074	917	1,134	1,125	2,479	396	126.1	-4.4	20.2
Washington.....	6,241	4,948	5,682	4,158	6,303	5,843	26.1	-2	.7
Other Power Producers	26,941	21,603	22,239	21,158	21,260	-	24.7	6.1	-
U.S. Total	1,038,972	1,029,229	1,005,573	962,039	951,461	889,699	0.9	2.2	1.7

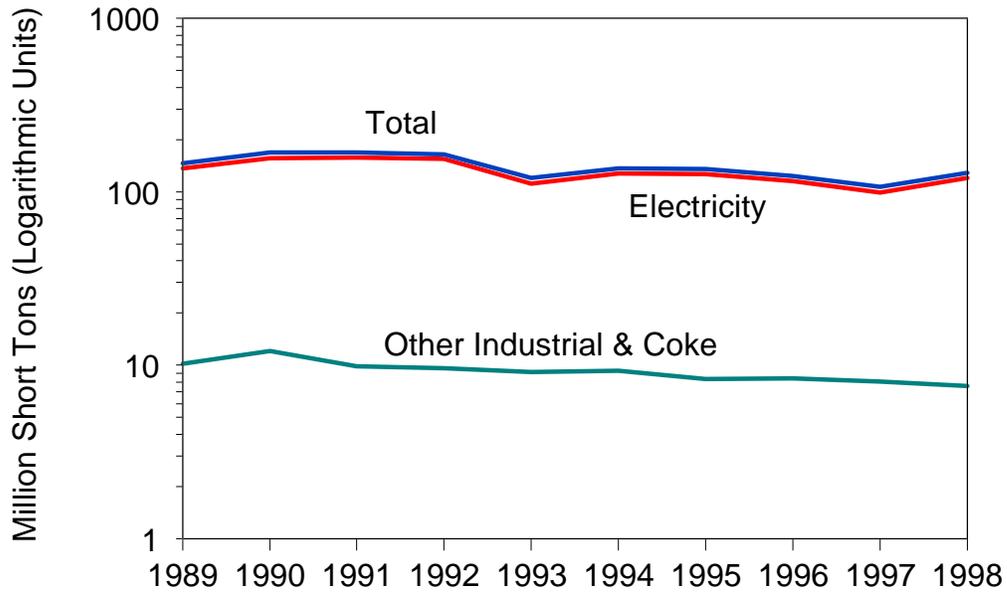
* Data round to zero.

NM Not meaningful as value is greater than 500 percent.

Notes: Totals may not equal sum of components due to independent rounding. Regional totals for 1989 may not sum to the U.S. total due to distribution to unknown State.

Sources: Energy Information Administration, Form EIA-759, "Monthly Power Plant Report"; Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants"; Form EIA-5, "Coke Plant Report - Quarterly"; Form EIA-6A, "Coal Distribution Report"; and for 1997 and prior years, Form EIA-867, "Annual Nonutility Power Producer Report", and for 1998 Form EIA-860B, "Annual Electric Generator Report - Nonutility."

Figure 10. U.S. Consumer Coal Stocks, 1989-1998



Note: Each increment represents end-of-year data. Industrial stocks reflect manufacturing plants and coke plants.

Sources: Energy Information Administration, • Electric Utilities: Form EIA-759, "Monthly Power Plant Report." • Industrial: Form EIA-5, "Coke Plant Report - Quarterly" and Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants."

Table 68. Year-End Consumer Coal Stocks by Census Division and State, 1989, 1994-1998

(Thousand Short Tons)

Census Division and State	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
New England Total	w	816	1,297	969	1,117	1,088	w	w	w
Connecticut.....	w	w	w	w	w	w	w	w	w
Maine.....	w	w	w	w	w	w	w	w	w
Massachusetts.....	w	w	w	w	w	w	w	w	w
New Hampshire.....	w	w	w	w	w	w	w	w	w
Rhode Island.....	-	-	-	-	-	28	-	-	-
Vermont.....	-	-	-	-	-	*	-	-	-
Middle Atlantic Total	w	w	w	w	w	w	w	w	w
New Jersey.....	w	w	w	w	w	w	w	w	w
New York.....	w	w	w	w	w	w	w	w	w
Pennsylvania.....	9,057	8,658	8,857	10,303	12,060	11,870	4.6	-6.9	-2.9
East North Central Total	36,808	30,794	30,815	33,818	35,833	38,922	19.5	.7	-6
Illinois.....	w	w	w	w	w	w	w	w	w
Indiana.....	8,989	6,643	7,955	9,298	11,707	9,398	35.3	-6.4	-5
Michigan.....	w	w	w	w	w	w	w	w	w
Ohio.....	6,175	6,324	5,428	5,936	7,815	7,055	-2.3	-5.7	-1.5
Wisconsin.....	4,969	4,427	4,459	3,656	3,436	4,178	12.2	9.6	1.9
West North Central Total	19,029	14,833	18,327	18,713	17,717	20,339	28.3	1.8	-7
Iowa.....	4,261	2,944	4,612	4,447	4,178	4,575	44.7	.5	-8
Kansas.....	3,187	2,298	2,984	3,860	2,623	3,284	38.7	5.0	-3
Minnesota.....	2,394	1,994	1,738	1,985	2,234	2,143	20.0	1.7	1.2
Missouri.....	5,159	3,851	5,317	4,779	4,570	4,455	33.9	3.1	1.6
Nebraska.....	w	w	w	w	w	w	w	w	w
North Dakota.....	w	w	w	w	w	w	w	w	w
South Dakota.....	w	w	w	w	w	w	w	w	w
South Atlantic Total	w	w	w	w	w	w	w	w	w
Delaware.....	w	w	w	w	w	w	w	w	w
Florida.....	4,649	3,508	3,438	3,268	3,914	4,490	32.5	4.4	.4
Georgia.....	3,566	2,407	3,848	3,786	4,843	5,181	48.1	-7.4	-4.1
Maryland.....	w	w	w	w	w	w	w	w	w
North Carolina.....	3,751	2,024	2,671	2,855	4,318	2,996	85.3	-3.5	2.5
South Carolina.....	2,743	2,021	2,177	2,194	2,533	2,164	35.7	2.0	2.7
Virginia.....	w	w	w	w	w	w	w	w	w
West Virginia.....	w	w	w	w	w	w	w	w	w
East South Central Total	w	w	w	w	w	w	w	w	w
Alabama.....	3,577	2,971	2,858	3,648	4,132	4,189	20.4	-3.5	-1.7
Kentucky.....	w	w	w	w	w	w	w	w	w
Mississippi.....	w	w	w	w	w	w	w	w	w
Tennessee.....	2,347	1,826	1,500	1,884	1,764	3,110	28.5	7.4	-3.1
West South Central Total	14,750	11,344	19,886	20,564	15,959	17,674	30.0	-1.9	-2.0
Arkansas.....	1,124	954	2,719	2,820	1,777	2,152	17.8	-10.8	-7.0
Louisiana.....	2,181	1,258	2,480	2,669	1,922	2,751	73.4	3.2	-2.5
Oklahoma.....	3,438	2,592	4,210	4,246	2,467	2,904	32.6	8.6	1.9
Texas.....	8,007	6,540	10,477	10,829	9,793	9,866	22.4	-4.9	-2.3
Mountain Total	w	w	w	w	w	w	w	w	w
Arizona.....	1,925	1,414	2,024	3,032	3,242	3,411	36.1	-12.2	-6.1
Colorado.....	2,862	2,476	3,054	3,682	3,145	3,970	15.6	-2.3	-3.6
Idaho.....	126	105	77	118	78	123	19.6	12.7	.3
Montana.....	w	w	w	w	w	w	w	w	w
Nevada.....	w	w	w	w	w	w	w	w	w
New Mexico.....	w	w	w	w	w	w	w	w	w
Utah.....	w	w	w	w	w	w	w	w	w
Wyoming.....	1,320	1,555	2,267	2,936	2,553	3,410	-15.1	-15.2	-10.0
Pacific Total	1,301	1,163	1,274	2,586	877	1,730	11.8	10.4	-3.1
Alaska.....	-	*	1	1	2	3	-	-	-
California.....	188	118	150	133	126	160	59.3	10.6	1.8
Hawaii.....	w	w	w	w	w	w	w	w	w
Oregon.....	w	w	w	w	w	w	w	w	w
Washington.....	w	882	857	1,969	569	1,054	-8	11.4	-2.0
U.S. Total	128,072	106,401	122,979	134,639	136,139	146,087	20.4	-1.5	-1.4

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

Notes: Stocks for the residential and commercial sector are not included. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-759, "Monthly Power Plant Report"; Form EIA-5, "Coke Plant Report - Quarterly"; and Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants."

Table 69. Coal Consumption at Electric Utility Plants by Census Division and State, 1989, 1994-1998
(Thousand Short Tons)

Census Division and State	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
New England Total	5,183	7,583	6,701	6,272	5,945	6,510	-31.6	-3.4	-2.5
Connecticut	590	1,058	925	881	821	877	-44.3	-7.9	-4.3
Massachusetts	3,128	4,826	4,406	4,044	3,845	4,474	-35.2	-5.0	-3.9
New Hampshire	1,465	1,699	1,369	1,346	1,279	1,160	-13.8	3.5	2.6
Middle Atlantic Total	54,738	54,179	51,718	49,357	48,326	56,642	1.0	3.2	-4
New Jersey	2,357	2,851	2,387	2,054	1,887	3,244	-17.3	5.7	-3.5
New York	9,410	8,726	8,254	8,051	8,395	10,158	7.8	2.9	-8
Pennsylvania	42,971	42,603	41,076	39,252	38,044	43,241	.9	3.1	-1
East North Central Total	204,721	204,251	198,900	187,490	183,282	166,437	.2	2.8	2.3
Illinois	38,255	41,017	38,090	33,463	32,599	25,758	-6.7	4.1	4.5
Indiana	55,086	54,845	52,855	52,089	50,554	42,378	.4	2.2	2.9
Michigan	34,021	31,928	32,175	31,165	31,106	29,972	6.5	2.3	1.4
Ohio	54,455	52,893	53,543	49,785	49,326	50,479	2.9	2.5	.8
Wisconsin	22,903	23,568	22,236	20,987	19,696	17,851	-2.8	3.8	2.8
West North Central Total	130,374	123,968	122,419	116,720	111,672	101,213	5.2	3.9	2.8
Iowa	20,031	18,195	17,864	17,785	16,565	14,598	10.1	4.9	3.6
Kansas	17,627	17,534	18,853	16,345	16,989	14,774	.5	.9	2.0
Minnesota	17,902	17,490	17,459	17,282	17,046	17,056	2.3	1.2	.5
Missouri	37,165	35,193	33,059	30,440	26,375	24,663	5.6	8.9	4.7
Nebraska	11,505	10,796	10,091	10,048	8,879	7,303	6.6	6.7	5.2
North Dakota	24,278	22,754	23,640	22,680	23,248	20,538	6.7	1.1	1.9
South Dakota	1,866	2,005	1,453	2,137	2,570	2,281	-6.9	-7.7	-2.2
South Atlantic Total	157,764	155,499	149,354	138,134	133,984	132,285	1.4	4.2	2.0
Delaware	1,592	1,686	1,787	1,816	2,007	2,128	-5.5	-5.6	-3.2
Florida	27,542	27,372	27,172	25,200	24,758	24,292	.6	2.7	1.4
Georgia	30,731	30,631	29,171	29,280	27,293	25,839	.3	3.0	1.9
Maryland	10,968	10,417	10,540	10,141	9,717	9,074	5.3	3.1	2.1
North Carolina	26,834	27,206	25,083	21,424	20,624	19,516	-1.4	6.8	3.6
South Carolina	12,664	12,096	11,833	10,074	10,597	9,472	4.7	4.5	3.3
Virginia	12,300	11,605	10,994	9,543	8,670	9,573	6.0	9.1	2.8
West Virginia	35,132	34,487	32,775	30,657	30,318	32,391	1.9	3.8	.9
East South Central Total	96,320	99,620	96,809	92,262	85,622	73,842	-3.3	3.0	3.0
Alabama	31,474	30,840	31,216	28,759	25,817	21,884	2.0	5.1	4.1
Kentucky	35,842	38,281	37,072	35,707	34,564	29,109	-6.4	.9	2.3
Mississippi	5,684	6,035	5,558	4,319	3,989	3,566	-5.8	9.3	5.3
Tennessee	23,320	24,464	22,964	23,477	21,253	19,283	-4.7	2.3	2.1
West South Central Total	141,671	144,218	140,493	132,633	131,168	124,171	-1.8	1.9	1.5
Arkansas	14,277	13,772	14,467	13,216	12,250	11,278	3.7	3.9	2.6
Louisiana	13,850	13,807	12,450	12,930	13,479	11,770	.3	.7	1.8
Oklahoma	18,883	20,101	19,386	18,130	16,961	14,423	-6.0	2.7	3.0
Texas	94,661	96,537	94,189	88,358	88,479	86,701	-1.9	1.7	1.0
Mountain Total	111,787	105,216	101,507	101,013	108,651	99,670	6.2	.7	1.3
Arizona	18,316	17,503	16,117	16,021	18,853	16,182	4.6	-7	1.4
Colorado	17,663	17,116	16,841	16,222	16,596	15,686	3.2	1.6	1.3
Montana	10,627	9,286	7,897	9,373	10,513	10,208	14.4	.3	.4
Nevada	7,961	7,261	7,424	7,084	7,772	7,487	9.6	.6	.7
New Mexico	15,883	15,802	15,215	15,137	15,297	15,250	.5	.9	.4
Utah	14,664	14,252	13,584	13,325	14,269	12,949	2.9	.7	1.4
Wyoming	26,674	23,997	24,430	23,850	25,350	21,908	11.1	1.3	2.2
Pacific Total	8,309	5,827	6,780	5,127	8,621	6,118	42.6	-9	3.4
Alaska	162	235	229	293	271	299	-31.1	-12.1	-6.6
Oregon	2,037	821	1,044	977	2,333	306	148.0	-3.3	23.4
Washington	6,111	4,770	5,507	3,857	6,016	5,514	28.1	.4	1.1
U.S. Total	910,867	900,361	874,681	829,007	817,270	766,888	1.2	2.7	1.9

Note: Totals may not equal sum of components due to independent rounding.
Source: Energy Information Administration, Form EIA-759, "Monthly Power Plant Report."

Table 70. Year-End Coal Stocks at Electric Utility Plants by Census Division and State, 1989, 1994-1998
(Thousand Short Tons)

Census Division and State	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
New England Total	575	754	1,236	908	1,079	1,058	-23.7	-14.6	-6.5
Connecticut	134	66	173	164	202	145	103.0	-9.7	-9
Massachusetts	163	389	704	425	629	642	-58.1	-28.6	-14.1
New Hampshire	278	298	359	319	248	243	-7.0	2.9	1.5
Rhode Island	-	-	-	-	-	28	-	-	-
Middle Atlantic Total	10,232	9,175	9,606	11,064	12,687	12,934	11.5	-5.2	-2.6
New Jersey	663	566	824	804	688	632	17.1	-9	.5
New York	1,128	819	905	1,015	999	1,233	37.7	3.1	-1.0
Pennsylvania	8,441	7,790	7,878	9,244	11,000	11,069	8.3	-6.4	-3.0
East North Central Total	34,128	28,051	27,618	30,505	32,088	34,948	21.7	1.5	-3
Illinois	6,572	4,828	4,578	5,331	4,526	8,204	36.1	9.8	-2.4
Indiana	8,198	5,822	7,103	8,435	10,449	8,043	40.8	-5.9	.2
Michigan	8,776	7,222	6,530	7,708	6,505	8,185	21.5	7.8	.8
Ohio	5,902	6,066	5,229	5,661	7,499	6,607	-2.7	-5.8	-1.2
Wisconsin	4,679	4,113	4,178	3,371	3,109	3,909	13.8	10.8	2.0
West North Central Total	17,961	13,707	17,107	17,732	16,739	19,356	31.0	1.8	-8
Iowa	3,788	2,447	4,042	3,923	3,642	4,044	54.8	1.0	-7
Kansas	3,168	2,282	2,968	3,850	2,610	3,266	38.8	5.0	-3
Minnesota	2,093	1,737	1,461	1,898	2,134	2,052	20.5	-5	.2
Missouri	5,032	3,670	5,159	4,641	4,410	4,275	37.1	3.3	1.8
Nebraska	2,096	1,596	1,691	1,409	1,276	1,685	31.3	13.2	2.4
North Dakota	1,580	1,755	1,642	1,858	2,406	3,731	-9.9	-10.0	-9.1
South Dakota	204	219	143	153	259	303	-7.3	-5.8	-4.3
South Atlantic Total	20,938	16,141	18,662	18,851	23,226	20,493	29.7	-2.5	.2
Delaware	470	319	322	363	470	259	47.6	*	6.8
Florida	4,565	3,441	3,349	3,204	3,813	4,383	32.7	4.6	.4
Georgia	3,424	2,279	3,727	3,657	4,699	5,040	50.3	-7.6	-4.2
Maryland	1,157	1,188	1,346	1,038	1,306	1,046	-2.7	-3.0	1.1
North Carolina	3,622	1,912	2,559	2,715	4,139	2,795	89.5	-3.3	2.9
South Carolina	2,539	1,809	1,979	2,033	2,255	1,873	40.3	3.0	3.4
Virginia	1,370	1,152	1,010	1,098	2,064	1,368	18.9	-9.7	*
West Virginia	3,791	4,042	4,370	4,744	4,479	3,729	-6.2	-4.1	.2
East South Central Total	10,808	9,329	8,514	10,148	10,317	11,651	15.8	1.2	-8
Alabama	3,195	2,609	2,526	3,282	3,652	3,721	22.5	-3.3	-1.7
Kentucky	4,668	4,475	4,119	4,472	4,466	4,299	4.3	1.1	.9
Mississippi	820	614	602	724	690	754	33.6	4.4	.9
Tennessee	2,124	1,630	1,266	1,670	1,509	2,875	30.3	8.9	-3.3
West South Central Total	14,396	11,050	19,525	20,195	15,520	16,917	30.3	-1.9	-1.8
Arkansas	1,107	934	2,701	2,790	1,751	2,134	18.4	-10.8	-7.0
Louisiana	2,157	1,248	2,470	2,659	1,872	2,627	72.8	3.6	-2.2
Oklahoma	3,349	2,516	4,067	4,118	2,319	2,826	33.1	9.6	1.9
Texas	7,784	6,352	10,287	10,628	9,578	9,329	22.5	-5.0	-2.0
Mountain Total	10,404	9,667	11,304	14,562	14,559	17,035	7.6	-8.0	-5.3
Arizona	1,855	1,386	1,992	2,998	3,197	3,367	33.9	-12.7	-6.4
Colorado	2,840	2,458	3,027	3,622	3,118	3,921	15.5	-2.3	-3.5
Montana	335	410	508	511	517	813	-18.3	-10.3	-9.4
Nevada	881	812	1,239	1,356	1,034	993	8.5	-3.9	-1.3
New Mexico	789	795	815	967	1,462	1,403	-8	-14.3	-6.2
Utah	2,461	2,309	1,526	2,250	2,753	3,202	6.6	-2.8	-2.9
Wyoming	1,243	1,498	2,197	2,857	2,476	3,337	-17.0	-15.8	-10.4
Pacific Total	1,060	952	1,052	2,341	683	1,469	11.4	11.6	-3.5
Alaska	-	*	1	1	2	3	-	-	-
Oregon	196	83	203	399	150	480	135.9	7.0	-9.5
Washington	864	868	848	1,941	531	986	-4	12.9	-1.4
U.S. Total	120,501	98,826	114,623	126,304	126,897	135,860	21.9	-1.3	-1.3

* Data round to zero.

R Revised Data.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, Form EIA-759, "Monthly Power Plant Report."

Table 71. Coal Consumption at Other Industrial Plants by Census Division and State, 1989, 1994-1998
(Thousand Short Tons)

Census Division and State	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
New England Total	w	226	268	321	553	406	w	w	w
Connecticut.....	-	-	-	w	w	w	-	-	-
Maine.....	w	w	w	w	w	w	w	w	w
Massachusetts.....	w	w	w	w	w	w	w	w	w
New Hampshire.....	-	-	-	*	w	w	-	-	-
Rhode Island.....	-	-	-	-	w	w	-	-	-
Vermont.....	107	-	-	-	w	w	-	-	42.5
Middle Atlantic Total	5,157	w	w	w	w	w	w	w	w
New Jersey.....	w	w	w	w	w	w	w	w	w
New York.....	w	1,419	1,449	1,408	1,559	1,993	w	w	w
Pennsylvania.....	3,618	4,410	4,466	4,027	4,044	3,995	-17.9	-2.7	-1.1
East North Central Total	15,753	16,989	17,113	16,566	17,098	19,086	-7.3	-2.0	-2.1
Illinois.....	3,813	3,863	3,740	3,653	4,187	3,770	-1.3	-2.3	.1
Indiana.....	4,395	5,086	4,987	4,373	4,244	4,738	-13.6	.9	-8
Michigan.....	2,190	2,415	2,914	2,983	2,890	3,798	-9.3	-6.7	-5.9
Ohio.....	3,666	3,863	3,794	3,609	3,794	4,727	-5.1	-8	-2.8
Wisconsin.....	1,689	1,761	1,678	1,949	1,984	2,053	-4.1	-3.9	-2.1
West North Central Total	13,452	13,182	13,415	13,581	13,238	12,168	2.0	.4	1.1
Iowa.....	3,040	3,151	3,085	2,761	2,735	2,351	-3.5	2.7	2.9
Kansas.....	109	137	154	138	137	183	-20.0	-5.5	-5.6
Minnesota.....	1,642	1,490	1,649	1,401	1,455	972	10.2	3.1	6.0
Missouri.....	1,258	1,206	1,118	1,102	1,070	1,436	4.3	4.1	-1.5
Nebraska.....	w	w	w	w	w	w	w	w	w
North Dakota.....	w	w	w	w	w	w	w	w	w
South Dakota.....	450	436	398	393	451	257	3.3	*	6.4
South Atlantic Total	w	w	w	w	w	w	w	w	w
Delaware.....	w	w	w	w	w	w	w	w	w
Florida.....	1,279	1,347	1,270	1,325	1,303	1,154	-5.1	-5	1.1
Georgia.....	1,959	2,046	1,985	1,949	1,933	2,067	-4.2	.3	-6
Maryland.....	768	790	785	760	738	685	-2.8	1.0	1.3
North Carolina.....	1,883	2,210	2,336	2,437	2,396	2,570	-14.8	-5.8	-3.4
South Carolina.....	1,962	2,014	2,000	2,188	2,334	2,491	-2.6	-4.3	-2.6
Virginia.....	2,354	2,502	2,613	2,585	2,838	3,576	-5.9	-4.6	-4.5
West Virginia.....	1,613	1,652	1,630	1,984	2,637	2,712	-2.3	-11.5	-5.6
East South Central Total	w	w	w	w	w	w	w	w	w
Alabama.....	2,562	2,565	2,545	2,286	2,394	2,275	-1	1.7	1.3
Kentucky.....	1,829	2,251	2,322	2,250	1,994	2,168	-18.8	-2.1	-1.9
Mississippi.....	w	w	w	w	w	w	w	w	w
Tennessee.....	3,463	3,608	3,670	3,777	4,097	3,924	-4.0	-4.1	-1.4
West South Central Total	5,784	5,839	5,978	6,456	7,082	5,905	-9	-4.9	-2
Arkansas.....	287	297	348	325	346	267	-3.4	-4.6	.8
Louisiana.....	w	w	w	w	w	w	w	w	w
Oklahoma.....	w	w	w	w	w	w	w	w	w
Texas.....	4,755	4,759	4,808	4,255	5,350	4,275	-1	-2.9	1.2
Mountain Total	w	4,702	4,141	5,615	5,614	4,789	w	w	w
Arizona.....	698	702	675	657	727	689	-6	-1.0	.1
Colorado.....	353	780	367	729	857	643	-54.8	-19.9	-6.4
Idaho.....	421	w	w	w	w	w	w	w	w
Montana.....	w	w	w	w	w	w	w	w	w
Nevada.....	w	w	w	w	w	w	w	w	w
New Mexico.....	w	w	w	w	w	w	w	w	w
Utah.....	852	527	512	915	835	686	61.5	.5	2.4
Wyoming.....	1,929	1,959	1,835	1,937	1,867	1,908	-1.5	.8	.1
Pacific Total	3,010	2,424	2,553	3,047	2,769	2,895	24.2	2.1	.4
Alaska.....	w	w	w	w	w	w	w	w	w
California.....	2,688	2,026	2,140	2,485	2,332	2,540	32.7	3.6	.6
Hawaii.....	w	w	w	w	w	w	w	w	w
Oregon.....	w	w	w	w	w	w	w	w	w
Washington.....	w	156	152	223	201	238	w	w	w
U.S. Total	68,120	70,599	70,941	73,055	75,179	76,134	-3.5	-2.4	-1.2

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

Note: Totals may not equal sum of components due to independent rounding. Regional totals for 1989 may not sum to the U.S. total due to distribution of coal to unknown State.

Sources: Energy Information Administration, Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants"; and Form EIA-6A, "Coal Distribution Report."

Table 72. Year-End Coal Stocks at Other Industrial Plants by Census Division and State, 1989, 1994-1998
(Thousand Short Tons)

Census Division and State	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
New England Total	w	62	60	60	38	30	w	w	w
Maine.....	w	w	w	w	w	w	w	w	w
Massachusetts.....	w	w	w	w	w	w	w	w	w
New Hampshire.....	-	-	-	-	-	w	-	-	-
Vermont.....	-	-	-	-	-	w	-	-	-
Middle Atlantic Total	w	w	w	w	w	w	w	w	w
New Jersey.....	w	w	w	w	w	w	w	w	w
New York.....	w	255	192	203	250	348	w	w	w
Pennsylvania.....	w	220	231	218	298	287	w	w	w
East North Central Total	1,730	1,926	1,862	2,031	2,462	2,479	-10.2	-8.4	-3.9
Illinois.....	290	237	252	333	426	435	22.1	-9.2	-4.4
Indiana.....	306	379	384	451	690	606	-19.3	-18.4	-7.3
Michigan.....	674	825	827	822	865	936	-18.4	-6.1	-3.6
Ohio.....	171	170	118	138	153	232	.2	2.8	-3.3
Wisconsin.....	290	314	281	286	328	269	-7.7	-3.0	.8
West North Central Total	1,069	1,126	1,220	981	978	983	-5.1	2.2	.9
Iowa.....	473	497	570	524	535	531	-4.9	-3.1	-1.3
Kansas.....	19	16	16	10	13	18	18.6	9.0	.3
Minnesota.....	301	257	277	87	99	91	17.1	31.9	14.2
Missouri.....	127	182	158	138	159	179	-29.9	-5.4	-3.7
Nebraska.....	w	w	w	w	w	w	w	w	w
North Dakota.....	w	w	w	w	w	w	w	w	w
South Dakota.....	27	24	17	58	20	8	10.6	7.6	14.8
South Atlantic Total	w	w	w	w	w	w	w	w	w
Delaware.....	w	w	w	w	w	w	w	w	w
Florida.....	84	67	89	64	101	107	25.2	-4.3	-2.6
Georgia.....	142	128	121	129	144	141	10.5	-3	.1
Maryland.....	21	16	30	24	36	46	32.8	-12.4	-8.3
North Carolina.....	128	112	112	140	179	201	14.7	-8.0	-4.8
South Carolina.....	203	212	198	160	278	291	-3.9	-7.5	-3.9
Virginia.....	120	149	133	177	217	326	-19.3	-13.7	-10.5
West Virginia.....	125	116	136	105	130	159	7.2	-1.0	-2.6
East South Central Total	w	w	w	w	w	w	w	w	w
Alabama.....	188	174	135	133	183	154	8.3	.7	2.2
Kentucky.....	76	86	83	120	112	112	-12.1	-9.2	-4.2
Mississippi.....	w	w	w	w	w	w	w	w	w
Tennessee.....	223	196	234	215	256	233	13.6	-3.4	-5
West South Central Total	354	294	361	370	439	736	20.4	-5.3	-7.8
Arkansas.....	17	20	18	29	26	17	-12.6	-9.4	-1
Louisiana.....	w	w	w	w	w	w	w	w	w
Oklahoma.....	w	w	w	w	w	w	w	w	w
Texas.....	223	188	190	201	215	517	18.4	.8	-8.9
Mountain Total	320	228	231	313	267	408	40.3	4.7	-2.7
Arizona.....	70	28	32	34	45	44	146.5	11.8	5.3
Colorado.....	23	18	27	59	26	50	25.1	-3.6	-8.5
Idaho.....	126	w	w	w	w	w	w	w	w
Montana.....	w	w	w	w	w	w	w	w	w
Nevada.....	w	w	w	w	w	w	w	w	w
New Mexico.....	w	w	w	w	w	w	w	w	w
Utah.....	5	3	5	7	13	83	81.2	-21.3	-26.7
Wyoming.....	77	57	71	79	77	74	35.8	.1	.5
Pacific Total	241	212	222	245	194	261	13.7	5.6	-9
California.....	188	118	150	133	126	160	59.3	10.6	1.8
Hawaii.....	w	w	w	w	w	w	w	w	w
Oregon.....	w	w	w	w	w	w	w	w	w
Washington.....	10	14	8	28	38	68	-23.6	-27.4	-18.7
U.S. Total	5,545	5,597	5,688	5,702	6,585	7,363	-.9	-4.2	-3.1

^w Withheld to avoid disclosure of individual company data.

Notes: Other industrial plants include manufacturing plants only. Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants."

Table 73. Coal Carbonized at Coke Plants by Census Division and State, 1989, 1994-1998
(Thousand Short Tons)

Census Division and State	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Middle Atlantic Total	8,401	w	w	w	w	w	w	w	w
New York	w	w	w	w	w	w	w	w	w
Pennsylvania	w	10,334	10,689	10,858	10,849	9,877	w	w	w
East North Central Total	12,322	11,366	11,414	12,345	11,356	18,507	8.4	2.1	-4.4
Illinois	w	w	w	w	w	w	w	w	w
Indiana	w	5,715	5,823	5,883	4,841	9,754	w	w	w
Michigan	w	w	w	w	w	w	w	w	w
Ohio	w	1,848	1,842	2,777	3,092	5,265	w	w	w
South Atlantic Total	w	w	w	w	w	w	w	w	w
Maryland	-	-	-	-	-	w	-	-	-
Virginia	w	w	w	w	w	w	w	w	w
West Virginia.....	w	w	w	w	w	w	w	w	w
East South Central Total	3,736	w	w	w	w	w	w	w	w
Alabama	w	2,956	3,247	3,257	3,253	3,314	w	w	w
Kentucky	w	w	w	w	w	w	w	w	w
Tennessee.....	-	-	-	-	-	w	-	-	-
Mountain Total	w	w	w	w	w	w	w	w	w
Utah.....	w	w	w	w	w	w	w	w	w
U.S. Total	28,189	30,203	31,706	33,011	31,740	40,508	-6.7	-2.9	-3.9

^w Withheld to avoid disclosure of individual company data.
Note: Totals may not equal sum of components due to independent rounding.
Source: Energy Information Administration, Form EIA-5, "Coke Plant Report - Quarterly."

Table 74. Year-End Coal Stocks at Coke Plants by Census Division and State, 1989, 1994-1998
(Thousand Short Tons)

Census Division and State	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Middle Atlantic Total	584	w	w	w	w	w	w	w	w
New York	w	w	w	w	w	w	w	w	w
Pennsylvania	w	648	748	841	762	514	w	w	w
East North Central Total	951	817	1,335	1,282	1,282	1,496	16.3	-7.2	-4.9
Illinois	w	w	w	w	w	w	w	w	w
Indiana	w	442	469	412	567	749	w	w	w
Michigan	w	w	w	w	w	w	w	w	w
Ohio	w	87	81	136	163	217	w	w	w
South Atlantic Total.....	w	w	w	w	w	w	w	w	w
Maryland	-	-	-	-	-	w	-	-	-
West Virginia.....	w	w	w	w	w	w	w	w	w
East South Central Total	341	w	w	w	w	w	w	w	w
Alabama	w	188	197	233	297	314	w	w	w
Kentucky	w	w	w	w	w	w	w	w	w
Tennessee.....	-	-	-	-	-	w	-	-	-
West South Central Total	-	-	-	-	-	21	-	-	-
Texas	-	-	-	-	-	21	-	-	-
Mountain Total	w	w	w	w	w	w	w	w	w
Utah.....	w	w	w	w	w	w	w	w	w
U.S. Total	2,026	1,978	2,667	2,632	2,657	2,864	2.4	-6.5	-3.8

^w Withheld to avoid disclosure of individual company data.
Note: Totals may not equal sum of components due to independent rounding.
Source: Energy Information Administration, Form EIA-5, "Coke Plant Report - Quarterly."

Table 75. Coal Consumption by Residential and Commercial Sector, by Census Division and State, 1989, 1994-1998
(Thousand Short Tons)

Census Division and State	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
New England Total	w	51	55	69	56	105	w	w	w
Connecticut	w	w	w	w	w	w	w	w	w
Maine	w	w	w	w	w	w	w	w	w
Massachusetts	w	w	w	w	w	w	w	w	w
New Hampshire	w	w	w	w	w	w	w	w	w
Rhode Island	w	w	w	w	w	w	w	w	w
Vermont	w	w	w	w	w	w	w	w	w
Middle Atlantic Total	993	1,504	1,285	1,416	1,351	1,727	-34.0	-7.4	-6.0
New Jersey	w	w	w	w	w	w	w	w	w
New York	w	w	w	w	w	w	w	w	w
Pennsylvania	841	1,244	995	1,188	1,156	1,413	-32.4	-7.6	-5.6
East North Central Total	1,272	1,370	1,574	1,301	1,452	1,556	-7.2	-3.3	-2.2
Illinois	w	w	w	w	w	w	w	w	w
Indiana	371	395	356	287	356	518	-6.2	1.0	-3.6
Michigan	w	w	w	w	w	w	w	w	w
Ohio	391	329	656	409	498	545	18.9	-5.9	-3.6
Wisconsin	w	w	w	w	w	w	w	w	w
West North Central Total	w	w	w	w	w	w	w	w	w
Iowa	279	374	222	90	40	176	-25.3	62.1	5.3
Kansas	*	2	78	38	32	6	-99.0	-83.5	-45.7
Minnesota	42	105	156	264	229	251	-60.4	-34.7	-18.1
Missouri	w	w	w	w	w	w	w	w	w
Nebraska	w	w	w	w	w	w	w	w	w
North Dakota	w	w	w	w	w	w	w	w	w
South Dakota	w	w	w	w	w	w	w	w	w
South Atlantic Total	640	598	803	954	887	649	6.9	-7.8	-1.1
Delaware	w	w	w	w	w	w	w	w	w
District of Columbia	6	40	23	6	47	60	-84.7	-39.8	-22.4
Florida	6	-	1	1	20	*	-	-27.4	37.7
Georgia	11	17	3	59	28	13	-33.9	-21.3	-1.7
Maryland	w	w	w	w	w	w	w	w	w
North Carolina	200	192	206	224	263	153	4.3	-6.5	3.0
South Carolina	23	1	19	17	61	17	NM	-21.9	3.2
Virginia	w	w	w	w	w	w	w	w	w
West Virginia	w	w	w	w	w	w	w	w	w
East South Central Total	266	557	272	283	386	505	-52.3	-8.9	-6.9
Alabama	9	73	44	7	11	63	-87.0	-2.9	-19.0
Kentucky	w	w	w	w	w	w	w	w	w
Mississippi	w	*	-	-	w	w	-	w	w
Tennessee	w	w	w	w	w	w	w	w	w
West South Central Total	15	291	1	17	1	17	-94.8	81.5	-1.2
Arkansas	*	*	-	-	*	3	-	-47.7	-41.9
Louisiana	w	*	w	5	w	w	-	w	w
Oklahoma	w	w	w	w	w	w	w	w	w
Texas	14	*	-	-	*	13	257.1	277.7	1.1
Mountain Total	w	w	w	w	w	w	w	w	w
Arizona	*	*	*	5	*	*	73.5	39.0	2.8
Colorado	18	65	13	20	23	64	-72.7	-6.3	-13.3
Idaho	58	30	28	39	40	81	90.8	9.4	-3.7
Montana	w	w	w	w	w	w	w	w	w
Nevada	w	w	w	w	w	w	w	w	w
New Mexico	w	w	w	w	w	w	w	w	w
Utah	w	w	w	w	w	w	w	w	w
Wyoming	159	140	382	146	242	136	13.3	-9.9	1.7
Pacific Total	659	634	675	734	773	107	4.0	-3.9	22.3
Alaska	530	503	474	523	520	-	5.4	.5	-
California	115	109	177	133	166	11	6.3	-8.7	29.7
Hawaii	w	w	w	w	w	w	w	w	w
Oregon	w	w	w	w	w	w	w	w	w
Washington	14	22	23	78	86	90	-36.5	-36.8	-18.9
U.S. Total	4,856	6,463	6,006	5,807	6,013	6,167	-24.9	-5.2	-2.6

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

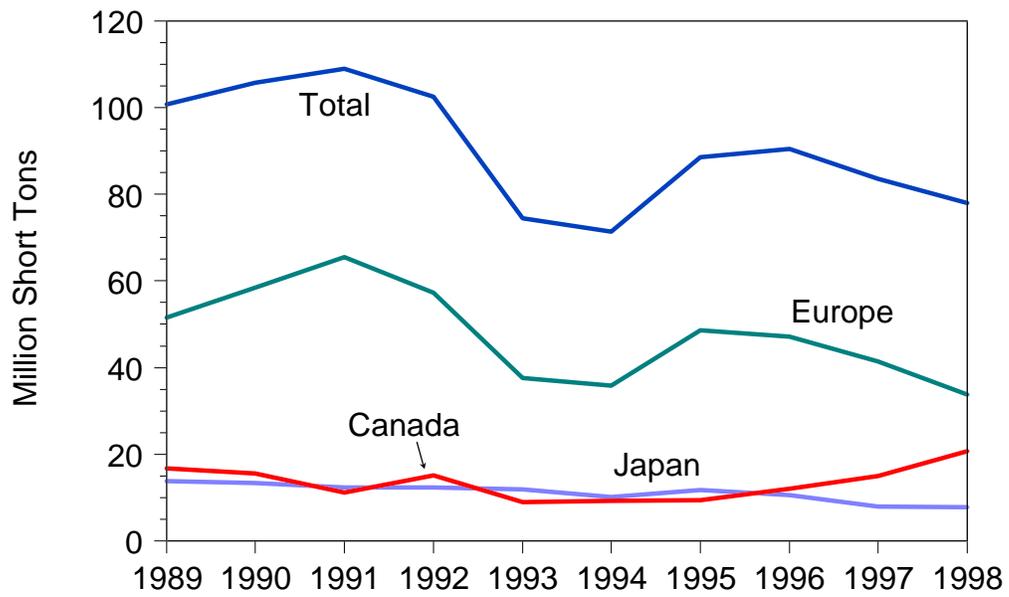
NM Not meaningful as value is greater than 500 percent.

Note: Totals may not equal sum of components due to independent rounding. Regional totals for 1989 may not sum to the U.S. total due to distribution of coal to unknown State.

Source: Energy Information Administration, Form EIA-6A, "Coal Distribution Report."

Foreign Markets

Figure 11. U.S. Coal Exports, 1989-1998



Source: U.S. Department of Commerce, Bureau of the Census, "Monthly Report EM-545."

Table 76. U.S. Coal Exports by Destination, 1989, 1994-1998
(Thousand Short Tons)

Continent and Country of Destination	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
North America Total	22,316	16,947	13,609	10,411	9,505	16,943	31.7	23.8	3.1
Canada ¹	20,654	14,975	12,029	9,427	9,193	16,777	37.9	22.4	2.3
Mexico.....	1,543	1,899	1,509	871	241	63	-18.7	59.1	42.6
Other ²	119	73	72	113	71	102	64.5	13.8	1.7
South America Total	7,034	8,214	7,505	6,968	5,946	7,384	-14.4	4.3	-5
Argentina.....	324	325	304	342	453	742	-4	-8.0	-8.8
Brazil.....	6,475	7,455	6,540	6,351	5,482	5,681	-13.1	4.3	1.5
Chile.....	51	146	574	227	*	943	-65.1	382.2	-27.7
Venezuela.....	90	200	45	22	12	18	-54.9	66.6	19.4
Other ²	95	89	42	27	*	1	6.4	317.5	63.0
Europe Total	33,773	41,331	47,193	48,620	35,825	51,604	-18.3	-1.5	-4.6
Belgium & Luxembourg.....	3,195	4,319	4,569	4,501	4,911	7,094	-26.0	-10.2	-8.5
Bulgaria.....	989	1,114	1,387	1,339	1,238	96	-11.2	-5.4	29.5
Denmark.....	274	350	1,316	2,100	477	3,178	-21.6	-12.9	-23.8
Finland.....	463	662	704	1,308	377	104	-30.0	5.3	18.1
France.....	3,192	3,398	3,852	3,659	2,875	6,517	-6.1	2.6	-7.6
Germany, FR.....	1,247	870	1,055	1,953	323	745	43.3	40.1	5.9
Iceland.....	39	54	62	39	7	64	-27.3	52.6	-5.4
Ireland.....	1,150	637	765	914	974	1,248	80.5	4.2	-9
Italy.....	5,317	7,019	9,204	9,063	7,543	11,240	-24.2	-8.4	-8.0
Netherlands.....	4,516	4,825	7,058	7,301	4,874	6,076	-6.4	-1.9	-3.2
Norway.....	93	96	85	120	87	141	-3.3	1.8	-4.5
Portugal.....	746	1,470	1,803	1,752	1,057	1,424	-49.3	-8.3	-6.9
Romania.....	1,097	2,244	1,512	1,984	1,553	1,562	-51.1	-8.3	-3.8
Spain.....	3,156	4,134	4,093	4,653	4,132	3,339	-23.6	-6.5	-6
Sweden.....	757	834	1,070	1,117	702	734	-9.2	1.9	.3
Turkey.....	1,592	2,092	2,167	2,011	1,335	1,686	-23.9	4.5	-6
United Kingdom.....	5,947	7,185	6,196	4,726	3,363	4,513	-17.2	15.3	3.1
Other ²	3	29	296	78	*	1,843	-91.2	62.9	-51.9
Asia Total	12,311	14,498	17,980	19,095	17,957	22,734	-15.1	-9.0	-6.6
China (Mainland).....	1	R 126	-	*	-	-	-99.5	-	-
China (Taiwan).....	1,519	2,241	2,441	2,533	3,374	4,497	-32.2	-18.1	-11.3
Israel.....	527	593	1,202	760	864	487	-11.1	-11.6	.9
Japan.....	7,734	7,974	10,529	11,787	10,158	13,846	-3.0	-6.6	-6.3
Korea, Republic of.....	2,453	R 3,489	3,773	4,012	3,558	3,836	-29.7	-8.9	-4.8
Other ²	77	R 75	36	2	3	68	3.2	119.6	1.4
Oceania & Australia Total	5	1	1	*	1	*	487.3	72.4	29.0
Other ²	5	1	1	*	1	*	487.3	72.4	29.0
Africa Total	2,609	2,554	4,184	3,453	2,124	2,149	2.1	5.3	2.2
Algeria.....	343	264	177	220	355	740	29.9	-8	-8.2
Egypt.....	891	1,130	1,038	1,235	1,048	585	-21.2	-4.0	4.8
Morocco.....	68	142	1,650	1,212	83	824	-52.0	-5.0	-24.2
South Africa, Rep of.....	1,299	987	1,320	786	638	-	31.6	19.5	-
Other ²	8	31	-	-	-	*	-75.3	-	55.9
Total	78,048	83,545	90,473	88,547	71,359	100,815	-6.6	2.3	-2.8

¹ Based on the U.S. - Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

² Includes countries with exports less than or equal to 50,000 short tons in 1997.

* Data round to zero.

R Revised data.

Note: Totals may not equal sum of components due to independent rounding.

Source: U.S. Department of Commerce, Bureau of the Census, "Monthly Report EM 545."

Table 77. U.S. Metallurgical Coal Exports by Destination, 1989, 1994-1998

(Thousand Short Tons)

Continent and Country of Destination	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
North America Total	4,947	5,355	6,500	4,776	4,246	6,838	-7.6	3.9	-3.5
Canada ¹	4,927	4,891	6,030	4,452	4,032	6,820	.7	5.1	-3.5
Mexico.....	20	463	470	324	214	-	-95.6	-44.4	-
Other ²	-	-	-	-	-	19	-	-	-100.0
South America Total	6,822	7,641	6,814	6,778	5,926	6,445	-10.7	3.6	.6
Argentina.....	303	277	291	336	449	741	9.2	-9.4	-9.5
Brazil.....	6,458	7,364	6,445	6,336	5,477	5,675	-12.3	4.2	1.4
Chile.....	-	-	78	106	-	29	-	-	-100.0
Venezuela.....	-	-	*	-	-	-	-	-	-
Other ²	60	-	-	-	-	-	-	-	-
Europe Total	26,002	28,802	28,253	27,282	25,245	34,870	-9.7	.7	-3.2
Belgium & Luxembourg.....	2,925	3,372	3,445	3,468	3,706	6,099	-13.3	-5.7	-7.8
Bulgaria.....	989	1,114	1,214	1,339	1,184	48	-11.2	-4.4	40.0
Denmark.....	-	-	-	-	-	128	-	-	-100.0
Finland.....	463	501	540	724	311	102	-7.6	10.5	18.3
France.....	3,103	3,056	3,084	3,155	2,816	4,841	1.5	2.4	-4.8
Germany, FR.....	380	650	538	231	288	517	-41.5	7.2	-3.3
Iceland.....	39	54	54	39	7	18	-27.3	52.6	8.7
Ireland.....	-	121	-	-	-	169	-100.0	-	-100.0
Italy.....	4,554	4,581	5,293	4,504	5,045	6,662	-6	-2.5	-4.1
Netherlands.....	4,115	4,114	4,142	3,978	3,231	3,138	*	6.2	3.0
Norway.....	86	90	61	92	73	93	-4.1	4.0	-8
Portugal.....	278	214	174	30	-	353	29.9	-	-2.6
Romania.....	1,097	2,148	1,512	1,685	663	1,558	-48.9	13.4	-3.8
Spain.....	2,398	2,251	2,103	2,178	2,656	3,139	6.5	-2.5	-2.9
Sweden.....	757	834	987	1,109	702	530	-9.2	1.9	4.0
Turkey.....	1,589	2,087	2,027	1,806	1,335	1,686	-23.8	4.4	-6
United Kingdom.....	3,228	3,615	3,081	2,932	3,228	4,191	-10.7	*	-2.9
Other ²	-	*	-	13	-	1,597	-100.0	-	-100.0
Asia Total	6,788	7,978	8,814	11,014	9,877	15,621	-14.9	-8.9	-8.8
China (Taiwan).....	345	555	376	370	296	800	-37.8	3.9	-8.9
Israel.....	73	137	265	141	-	149	-46.3	-	-7.6
Japan.....	4,329	4,791	5,552	7,929	7,195	11,449	-9.6	-11.9	-10.2
Korea, Republic of.....	2,029	2,472	2,597	2,574	2,386	3,162	-17.9	-4.0	-4.8
Other ²	12	23	24	-	-	60	-48.0	-	-16.3
Oceania & Australia Total	3	-	-	-	-	-	-	-	-
Other ²	3	-	-	-	-	-	-	-	-
Africa Total	2,532	2,379	2,570	2,239	2,040	1,353	6.4	5.5	7.2
Algeria.....	343	264	177	220	355	740	29.9	-8	-8.2
Egypt.....	890	1,128	1,037	1,233	1,047	585	-21.1	-4.0	4.8
Morocco.....	-	-	37	-	-	28	-	-	-100.0
South Africa, Rep of.....	1,299	987	1,320	786	638	-	31.6	19.5	-
Total	47,093	52,154	52,950	52,089	47,334	65,128	-9.7	-1	-3.5

¹ Based on the U.S. - Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

² Includes countries with exports less than or equal to 50,000 short tons in 1997.

* Data round to zero.

Note: Totals may not equal sum of components due to independent rounding.

Source: U.S. Department of Commerce, Bureau of the Census, "Monthly Report EM 545."

Table 78. U.S. Steam Coal Exports by Destination, 1989, 1994-1998

(Thousand Short Tons)

Continent and Country of Destination	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
North America Total	17,368	11,592	7,110	5,635	5,259	10,104	49.8	34.8	6.2
Canada ¹	15,727	10,084	5,999	4,975	5,161	9,957	55.9	32.1	5.2
Mexico.....	1,522	1,435	1,039	547	26	63	6.0	175.6	42.4
Other ²	119	73	72	113	71	84	64.5	13.8	4.0
South America Total	213	573	691	190	20	940	-62.8	79.8	-15.2
Argentina.....	21	48	13	6	4	*	-55.7	55.7	58.6
Brazil.....	17	90	95	15	5	6	-81.7	37.3	12.5
Chile.....	51	146	496	121	*	914	-65.1	382.2	-27.5
Venezuela.....	90	200	45	22	12	18	-54.9	66.6	19.4
Other ²	34	89	42	27	*	1	-61.7	223.4	45.5
Europe Total	7,771	12,530	18,940	21,338	10,580	16,734	-38.0	-7.4	-8.2
Belgium & Luxembourg.....	270	947	1,125	1,033	1,205	995	-71.5	-31.2	-13.5
Bulgaria.....	-	-	173	-	54	49	-	-100.0	-100.0
Denmark.....	274	350	1,316	2,100	477	3,050	-21.6	-12.9	-23.5
Finland.....	-	160	164	584	66	2	-100.0	-100.0	-100.0
France.....	89	342	769	503	58	1,676	-74.1	11.0	-27.8
Germany, FR.....	867	221	517	1,722	35	227	292.8	122.4	16.0
Iceland.....	-	-	8	-	-	46	-	-	-100.0
Ireland.....	1,150	516	765	914	974	1,078	122.8	4.2	.7
Italy.....	764	2,438	3,911	4,559	2,498	4,578	-68.7	-25.6	-18.0
Netherlands.....	401	711	2,917	3,323	1,643	2,938	-43.6	-29.7	-19.8
Norway.....	7	7	24	28	13	49	8.0	-14.2	-19.1
Portugal.....	468	1,256	1,628	1,722	1,057	1,071	-62.8	-18.4	-8.8
Romania.....	-	96	-	299	890	3	-100.0	-100.0	-100.0
Spain.....	758	1,883	1,990	2,475	1,476	201	-59.7	-15.3	15.9
Sweden.....	-	-	83	9	-	204	-	-	-100.0
Turkey.....	3	5	140	206	-	*	-38.8	-	35.4
United Kingdom.....	2,719	3,570	3,115	1,795	135	321	-23.8	112.0	26.8
Other ²	3	29	296	66	*	246	-91.2	62.9	-39.9
Asia Total	5,523	6,520	9,166	8,081	8,080	7,113	-15.3	-9.1	-2.8
China (Mainland).....	1	R 126	-	*	-	-	-99.5	-	-
China (Taiwan).....	1,174	1,686	2,066	2,163	3,078	3,697	-30.3	-21.4	-12.0
Israel.....	454	456	936	620	864	338	-5	-14.9	3.3
Japan.....	3,406	3,183	4,976	3,858	2,963	2,397	7.0	3.5	4.0
Korea, Republic of.....	424	1,017	1,175	1,438	1,172	674	-58.3	-22.4	-5.0
Other ²	65	R 51	12	2	3	7	26.5	110.4	27.4
Oceania & Australia Total	2	1	1	*	1	*	139.1	37.7	16.7
Other ²	2	1	1	*	1	*	139.1	37.7	16.7
Africa Total	77	175	1,615	1,214	85	795	-56.3	-2.5	-22.9
Egypt.....	1	2	1	2	1	-	-60.6	-11.9	-
Morocco.....	68	142	1,614	1,212	83	795	-52.0	-5.0	-23.9
South Africa, Rep of.....	-	-	-	*	-	-	-	-	-
Other ²	8	31	-	-	-	*	-75.3	-	55.9
Total	30,954	31,390	37,522	36,458	24,025	35,687	-1.4	6.5	-1.6

¹ Based on the U.S. - Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

² Includes countries with exports less than or equal to 50,000 short tons in 1997.

* Data round to zero.

R Revised data.

Note: Totals may not equal sum of components due to independent rounding.

Source: U.S. Department of Commerce, Bureau of the Census, "Monthly Report EM 545."

Table 79. Coal Exports by Customs District, 1989, 1994-1998
(Thousand Short Tons)

Customs District	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Eastern Total	49,138	52,806	58,161	55,374	43,474	60,406	-6.9	3.1	-2.3
Boston, MA.....	-	22	-	33	-	-	-100.0	-	-
Baltimore, MD.....	6,576	6,297	11,221	11,313	7,912	9,330	4.4	-4.5	-3.8
Portland, ME.....	400	1	*	57	1	*	NM	387.0	138.7
Buffalo, NY.....	5,612	3,594	2,263	1,574	166	48	56.2	141.3	69.6
New York City, NY.....	10	3	6	87	1	2	188.7	67.2	21.0
Ogdensburg, NY.....	87	92	116	163	337	10	-5.5	-28.8	27.1
Philadelphia, PA.....	202	265	406	339	213	2,497	-23.8	-1.3	-24.4
Norfolk, VA.....	36,252	42,533	44,148	41,808	34,845	48,520	-14.8	1.0	-3.2
St. Albans, VT.....	-	1	1	*	*	-	-100.0	-100.0	-
Southern Total	11,267	15,327	16,077	19,936	15,607	20,720	-26.5	-7.8	-6.5
Mobile, AL.....	4,537	5,379	5,897	8,283	4,997	8,827	-15.7	-2.4	-7.1
Savannah, GA.....	2	37	-	4	1	1	-95.8	19.6	8.8
Miami, FL.....	2	1	2	2	3	11	55.3	-6.6	-17.1
Tampa, FL.....	*	*	-	1	*	1	-12.1	5.8	-10.8
New Orleans, LA.....	4,852	7,639	8,669	10,522	9,475	10,851	-36.5	-15.4	-8.5
Wilmington, NC.....	*	*	*	-	-	70	1.7	-	-54.3
San Juan, PR.....	40	83	*	*	26	-	-52.3	11.6	-
Charleston, SC.....	*	164	154	401	957	835	-99.9	-90.0	-63.4
El Paso, TX.....	-	*	-	*	-	-	-100.0	-	-
Houston-Galveston, TX.....	299	560	297	179	121	77	-46.6	25.3	16.3
Laredo, TX.....	1,535	1,463	1,057	542	26	47	4.9	178.0	47.2
Western Total	3,798	4,771	6,832	5,527	3,813	3,155	-20.4	-1	2.1
Anchorage, AK.....	343	740	784	919	719	661	-53.6	-16.9	-7.0
Nogales, AZ.....	*	-	*	-	*	-	-	-28.0	-
Los Angeles, CA.....	3,440	3,785	5,899	4,475	2,963	2,301	-9.1	3.8	4.6
San Diego, CA.....	3	*	-	*	1	4	445.0	38.2	-5.7
San Francisco, CA.....	3	104	1	*	1	42	-97.1	32.3	-25.5
Great Falls, MT.....	3	1	*	*	1	*	413.8	48.9	46.5
Portland, OR.....	-	41	-	-	-	1	-100.0	-	-100.0
Seattle, WA.....	5	100	147	132	128	145	-94.7	-55.0	-30.8
Northern Total	14,308	10,616	9,358	7,688	8,437	16,534	34.8	14.1	-1.6
Chicago, IL.....	-	21	-	-	24	-	-100.0	-100.0	-
Detroit, MI.....	2,498	2,283	3,804	1,845	2,600	45	9.4	-1.0	56.4
Duluth, MN.....	1,093	128	247	210	161	283	NM	61.4	16.2
Pembina, ND.....	67	1	1	19	10	15	NM	59.0	18.0
Cleveland, OH.....	10,651	8,183	5,306	5,614	5,642	16,191	30.1	17.2	-4.5
Milwaukee, WI.....	*	-	-	-	-	-	-	-	-
Other Ports	47	25	45	22	28	-	86.8	14.1	-
Total	78,048	83,545	90,473	88,547	71,359	100,815	-6.6	2.3	-2.8

* Data round to zero.

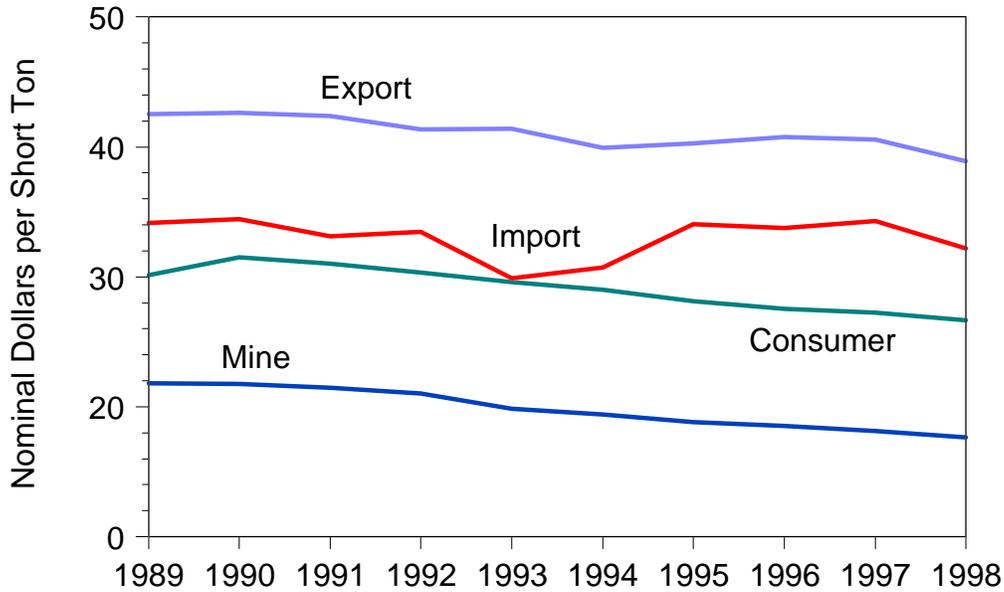
NM Not meaningful as value is greater than 500 percent.

Note: Totals may not equal sum of components due to independent rounding.

Source: U.S. Department of Commerce, Bureau of the Census, "Monthly Report EM 545."

Coal Prices

Figure 12. Coal Prices, 1989-1998



Note: Average mine prices exclude mines producing less than 10,000 short tons of coal during the year. Mine Price is calculated by dividing the total free on board (f.o.b.) mine value of the coal produced by the total production. Consumer Price is based on the cost including insurance and freight (C.I.F. cost) for electric utilities, and insurance, freight and taxes for manufacturing and coke plants, and does not include the residential and commercial sector. Export Price is based on the free alongside ship (f.a.s.) value. Import Price is based on the customers import value.

Sources: • Mine Price: Energy Information Administration (EIA), Form EIA-7A, "Coal Production Report"; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report." • Consumer Prices: Federal Regulatory Commission (FERC), FERC Form 423, "Monthly Report on Cost and Quality of Fuels for Electric Plants"; EIA, Form EIA-5, "Coke Plant Report - Quarterly" and Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants." • Export Prices: U.S. Department of Commerce, Bureau of the Census, "Monthly Report EM 545." • Import Prices: U.S. Department of Commerce, Bureau of the Census, "Monthly Report IM 145."

Mine Prices

Table 80. Average Mine Price of Coal by State, 1989, 1994-1998
(Nominal Dollars per Short Ton)

Coal-Producing State and Region	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Alabama.....	\$37.23	\$38.48	\$39.48	\$38.44	\$40.12	\$41.18	-3.2	-1.8	-1.1
Alaska.....	w	w	w	w	w	w	w	w	w
Arizona.....	w	w	w	w	w	w	w	w	w
Arkansas.....	w	w	-	w	w	w	w	w	w
California.....	-	-	-	-	-	w	-	-	-
Colorado.....	\$17.30	\$18.46	\$17.94	\$19.26	\$19.76	\$23.64	-6.3	-3.3	-3.4
Illinois.....	22.86	21.44	22.74	23.05	23.14	28.17	6.6	-3	-2.3
Indiana.....	19.68	19.62	20.24	21.71	22.28	23.55	.3	-3.0	-2.0
Iowa.....	-	-	-	-	w	w	-	-	-
Kansas.....	w	w	w	w	w	\$27.00	w	w	w
Kentucky Total.....	\$23.82	\$23.72	\$23.91	\$24.79	\$24.88	24.97	.4	-1.1	-5
Eastern.....	24.59	24.65	24.98	26.00	25.25	25.80	-.3	-.7	-5
Western.....	21.01	20.49	20.38	20.75	23.63	22.48	2.5	-2.9	-8
Louisiana.....	w	w	w	w	w	w	w	w	w
Maryland.....	\$24.35	\$23.26	\$24.40	\$24.69	\$26.34	\$24.73	4.7	-1.9	-2
Missouri.....	20.78	16.87	23.31	18.91	w	w	23.2	w	w
Montana.....	8.25	9.84	9.96	9.62	\$10.39	\$10.27	-16.1	-5.6	-2.4
New Mexico.....	20.68	21.83	24.66	23.80	23.29	23.42	-5.3	-2.9	-1.4
North Dakota.....	8.01	8.06	8.01	7.99	7.62	7.36	-6	1.3	.9
Ohio.....	27.56	23.66	24.85	25.97	29.13	30.49	16.5	-1.4	-1.1
Oklahoma.....	26.02	26.32	26.54	24.13	25.57	28.46	-1.2	.4	-1.0
Pennsylvania Total.....	25.87	25.98	25.78	26.78	26.18	29.33	-.4	-.3	-1.4
Anthracite.....	42.91	35.12	36.78	39.78	36.07	42.93	22.2	4.4	*
Bituminous.....	24.75	25.41	24.98	25.77	25.45	28.74	-2.6	-.7	-1.6
Tennessee.....	28.69	27.03	27.79	26.94	27.17	26.98	6.1	1.4	.7
Texas.....	12.47	12.15	12.17	12.16	12.38	10.91	2.6	.2	1.5
Utah.....	18.47	17.61	21.63	19.10	19.27	21.46	4.9	-1.1	-1.6
Virginia.....	28.69	28.24	28.45	28.47	26.84	27.64	1.6	1.7	.4
Washington.....	w	w	w	w	w	w	w	w	w
West Virginia Total.....	\$27.07	\$26.64	\$26.58	\$27.18	\$27.42	\$28.69	1.6	-.3	-.6
Northern.....	25.62	25.86	24.86	24.91	26.77	28.09	-.9	-1.1	-1.0
Southern.....	27.57	26.90	27.21	28.07	27.71	29.03	2.5	-.1	-.6
Wyoming.....	5.41	6.00	6.41	6.58	6.83	8.63	-9.8	-5.6	-5.0
Appalachian Total¹.....	26.85	26.55	26.78	27.45	27.36	28.74	1.1	-.5	-.8
Interior Total¹.....	18.45	17.91	18.41	18.81	19.87	21.31	3.0	-1.8	-1.6
Western Total¹.....	8.76	9.52	10.03	10.15	10.57	12.12	-8.0	-4.6	-3.5
East of Miss. River.....	25.78	25.39	25.70	26.35	26.44	27.95	1.5	-.6	-.9
West of Miss. River.....	9.25	9.92	10.40	10.48	10.91	12.25	-6.8	-4.0	-3.1
U.S. Total.....	17.67	18.14	18.50	18.83	19.41	21.82	-2.6	-2.3	-2.3

¹ For a definition of coal-producing regions, see Appendix C.

* Data round to zero.

^w Withheld to avoid disclosure of individual company data.

Notes: For 1997 and prior years, average mine price is calculated by dividing the total free on board (f.o.b.) mine value of the coal produced by the total production. For 1998, average mine price is calculated by dividing the total free on board (f.o.b.) rail/barge value of the coal sold by the total coal sold. A measure of dispersion of the 1998 average prices at the State level (interquartile range) is given in Appendix D, Table D1. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report"; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 81. Average Real Mine Price of Coal by State, 1989, 1994-1998
(Real 1992 Dollars per Short Ton)

Coal-Producing State and Region	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Alabama.....	\$33.04	\$34.48	\$36.06	\$35.76	\$38.17	\$45.91	-4.2	-3.5	-3.6
Alaska.....	w	w	w	w	w	w	w	w	w
Arizona.....	w	w	w	w	w	w	w	w	w
Arkansas.....	w	w	-	w	w	w	w	w	w
California.....	-	-	-	-	-	w	-	-	-
Colorado.....	\$15.35	\$16.54	\$16.38	\$17.91	\$18.80	\$26.35	-7.2	-4.9	-5.8
Illinois.....	20.28	19.21	20.77	21.45	22.01	31.40	5.6	-2.0	-4.7
Indiana.....	17.46	17.58	18.49	20.20	21.20	26.26	-7	-4.7	-4.4
Iowa.....	-	-	-	-	w	w	-	-	-
Kansas.....	w	w	w	w	w	\$30.10	w	w	w
Kentucky Total.....	\$21.13	\$21.25	\$21.84	\$23.06	\$23.67	27.84	-6	-2.8	-3.0
Eastern.....	21.82	22.09	22.81	24.18	24.03	28.76	-1.2	-2.4	-3.0
Western.....	18.64	18.36	18.62	19.31	22.49	25.06	1.5	-4.6	-3.2
Louisiana.....	w	w	w	w	w	w	w	w	w
Maryland.....	\$21.61	\$20.84	\$22.28	\$22.97	\$25.06	\$27.57	3.7	-3.6	-2.7
Missouri.....	18.44	15.12	21.29	17.59	w	w	22.0	w	w
Montana.....	7.32	8.82	9.10	8.95	\$9.89	\$11.45	-16.9	-7.2	-4.8
New Mexico.....	18.35	19.56	22.52	22.14	22.16	26.10	-6.2	-4.6	-3.8
North Dakota.....	7.11	7.22	7.32	7.44	7.25	8.20	-1.6	-5	-1.6
Ohio.....	24.45	21.20	22.69	24.15	27.71	33.99	15.3	-3.1	-3.6
Oklahoma.....	23.09	23.59	24.23	22.45	24.33	31.73	-2.1	-1.3	-3.5
Pennsylvania Total.....	22.96	23.28	23.54	24.91	24.91	32.70	-1.4	-2.0	-3.8
Anthracite.....	38.08	31.47	33.59	37.01	34.32	47.85	21.0	2.6	-2.5
Bituminous.....	21.96	22.77	22.82	23.97	24.21	32.04	-3.5	-2.4	-4.1
Tennessee.....	25.46	24.22	25.38	25.06	25.85	30.08	5.1	-4	-1.8
Texas.....	11.06	10.89	11.11	11.31	11.78	12.16	1.6	-1.6	-1.0
Utah.....	16.38	15.78	19.76	17.77	18.34	23.93	3.8	-2.8	-4.1
Virginia.....	25.45	25.31	25.98	26.48	25.54	30.81	.6	-.1	-2.1
Washington.....	w	w	w	w	w	w	w	w	w
West Virginia Total.....	\$24.02	\$23.87	\$24.27	\$25.28	\$26.09	\$31.98	.6	-2.0	-3.1
Northern.....	22.73	23.17	22.71	23.18	25.47	31.32	-1.9	-2.8	-3.5
Southern.....	24.46	24.10	24.85	26.11	26.36	32.36	1.5	-1.8	-3.1
Wyoming.....	4.80	5.38	5.85	6.12	6.50	9.62	-10.7	-7.3	-7.4
Appalachian Total¹.....	23.82	23.79	24.46	25.53	26.04	32.04	.1	-2.2	-3.2
Interior Total¹.....	16.37	16.05	16.81	17.50	18.90	23.76	2.0	-3.5	-4.0
Western Total¹.....	7.77	8.53	9.16	9.44	10.06	13.51	-8.9	-6.2	-5.9
East of Miss. River.....	22.88	22.75	23.47	24.51	25.16	31.16	.5	-2.3	-3.4
West of Miss. River.....	8.21	8.89	9.50	9.75	10.38	13.66	-7.7	-5.7	-5.5
U.S. Total.....	15.68	16.25	16.89	17.52	18.47	24.33	-3.5	-4.0	-4.8

¹ For a definition of coal-producing regions, see Appendix C.

w Withheld to avoid disclosure of individual company data.

Notes: Real prices are in 1992 dollars, calculated using implicit Gross Domestic Product price deflators. See Appendix D, Table D2. For 1997 and prior years, average mine price is calculated by dividing the total free on board (f.o.b.) mine value of the coal produced by the total production. For 1998, average mine price is calculated by dividing the total free on board (f.o.b.) rail/barge value of the coal sold by the total coal sold. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report"; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 82. Average Price of Coal by State and Mine Type, 1998
(Dollars per Short Ton)

Coal-Producing State and Region	Underground		Surface		Total	
	Nominal	Real ¹	Nominal	Real ¹	Nominal	Real ¹
Alabama.....	\$37.69	\$33.44	\$35.89	\$31.85	\$37.23	\$33.04
Alaska.....	—	—	w	w	w	w
Arizona.....	—	—	w	w	w	w
Arkansas.....	—	—	w	w	w	w
Colorado.....	16.38	14.53	\$19.14	\$16.99	\$17.30	\$15.35
Illinois.....	22.96	20.37	22.07	19.58	22.86	20.28
Indiana.....	w	w	w	w	19.68	17.46
Kansas.....	—	—	w	w	w	w
Kentucky Total.....	\$24.23	\$21.50	\$23.16	\$20.55	\$23.82	\$21.13
Eastern.....	25.36	22.51	23.57	20.91	24.59	21.82
Western.....	21.23	18.83	20.24	17.96	21.01	18.64
Louisiana.....	—	—	w	w	w	w
Maryland.....	w	w	w	w	\$24.35	21.61
Missouri.....	—	—	\$20.78	\$18.44	\$20.78	\$18.44
Montana.....	—	—	8.25	7.32	8.25	7.32
New Mexico.....	w	w	w	w	20.68	18.35
North Dakota.....	—	—	\$8.01	\$7.11	8.01	7.11
Ohio.....	\$28.48	\$25.27	26.61	23.61	27.56	24.45
Oklahoma.....	w	w	w	w	26.02	23.09
Pennsylvania Total.....	\$25.40	\$22.54	\$27.20	\$24.14	25.87	22.96
Anthracite.....	45.19	40.10	42.75	37.93	\$42.91	38.08
Bituminous.....	25.29	22.44	22.84	20.26	24.75	21.96
Tennessee.....	w	w	w	w	28.69	25.46
Texas.....	—	—	\$12.47	\$11.06	12.47	11.06
Utah.....	\$18.47	\$16.38	—	—	18.47	16.38
Virginia.....	29.55	26.22	26.21	23.26	28.69	25.45
Washington.....	—	—	w	w	w	w
West Virginia Total.....	28.25	25.07	\$24.50	\$21.74	\$27.07	\$24.02
Northern.....	26.14	23.19	21.88	19.42	25.62	22.73
Southern.....	29.28	25.98	24.79	21.99	27.57	24.46
Wyoming.....	w	w	w	w	5.41	4.80
Appalachian Total².....	27.65	24.53	25.31	22.46	26.85	23.83
Interior Total².....	22.33	19.81	16.05	14.24	18.45	16.37
Western Total².....	17.58	15.60	7.77	6.89	8.76	7.77
East of Miss. River.....	26.72	23.71	24.07	21.36	25.78	22.88
West of Miss. River.....	17.66	15.67	8.41	7.46	9.25	8.21
U.S. Total.....	25.64	22.75	12.92	11.47	17.67	15.68

¹ Real prices are in 1992 dollars, calculated using implicit Gross Domestic Product price deflators. See Appendix D, Table D2.

² For a definition of coal-producing regions, see Appendix C.

^w Withheld to avoid disclosure of individual company data.

Notes: Average price is calculated by dividing the total free on board (f.o.b.) rail/barge value of the coal sold by the total coal sold. A measure of dispersion of these average nominal prices at the State level (interquartile range) is given in Appendix D, Table D2. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 83. Average Price of Coal by State and Underground Mining Method, 1998
(Nominal Dollars per Short Ton)

Coal-Producing State and Region	Continuous ¹	Conventional ²	Longwall ³	Other ⁴	Total
Alabama.....	w	\$37.61	\$37.99	w	\$37.69
Colorado.....	w	—	w	—	16.38
Illinois.....	w	—	\$24.45	—	22.96
Indiana.....	w	—	—	—	w
Kentucky Total.....	\$24.15	25.30	23.58	\$35.37	\$24.23
Eastern.....	w	25.30	27.33	35.37	25.36
Western.....	w	—	22.53	—	21.23
Maryland.....	w	—	w	—	w
New Mexico.....	w	—	—	—	w
Ohio.....	\$21.15	—	\$29.91	—	\$28.48
Oklahoma.....	w	—	—	—	w
Pennsylvania Total.....	\$25.99	w	25.19	w	\$25.40
Anthracite.....	w	w	—	w	45.19
Bituminous.....	w	w	25.19	—	25.29
Tennessee.....	\$26.69	w	—	—	w
Utah.....	w	w	18.06	—	\$18.47
Virginia.....	w	w	31.13	—	29.55
West Virginia Total.....	\$27.98	\$28.81	28.54	—	28.25
Northern.....	20.65	25.42	27.81	—	26.14
Southern.....	29.14	30.50	29.46	—	29.28
Wyoming.....	w	—	w	—	w
Appalachian Total⁵.....	26.75	27.33	28.57	35.04	27.65
Interior Total⁵.....	21.69	—	23.73	—	22.33
Western Total⁵.....	20.71	18.83	17.27	—	17.58
East of Miss. River.....	25.60	27.33	27.95	35.04	26.72
West of Miss. River.....	21.38	18.83	17.27	—	17.66
U.S. Total.....	25.51	26.43	25.59	35.04	25.64

¹ Mines that produce greater than 50 percent of coal by continuous mining method.

² Mines that produce greater than 50 percent of coal by conventional mining method, or mines that produce less than 10,000 short tons, which are not required to provide data.

³ Mines that have any production from longwall mining method. A typical longwall mining operation uses 80 percent longwall mining and 20 percent continuous mining.

⁴ Mines that produce coal using shortwall, scoop loading, hand loading, or other mining methods or a 50/50 percent continuous/conventional split in mining method.

⁵ For a definition of coal-producing regions, see Appendix C.

w Withheld to avoid disclosure of individual company data.

Notes: Average price is calculated by dividing the total free on board (f.o.b.) rail/barge value of the coal sold by the total coal sold. Excludes mines producing less than 10,000 short tons, which are not required to provide data.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

**Table 84. Coal Disposition, Number of Mines, and Average Price,
by State and County, 1998**
(Thousand Short Tons, Nominal Dollars per Short Ton)

Coal-Producing State and County	Number of Mines	Disposition	Average Mine Price
Alabama	48	22,074	37.23
Bibb	1	22	w
Cullman	2	85	w
Fayette	1	2,408	w
Jefferson	7	9,416	\$43.04
Marion	1	19	w
Shelby	3	423	w
Tuscaloosa	7	6,018	\$32.93
Walker	23	3,457	35.81
Winston	3	225	w
Alaska	1	1,341	w
Yukon River	1	1,341	w
Arizona	2	12,169	w
Navajo	2	12,169	w
Arkansas	1	19	w
Johnson	1	19	w
Colorado	12	29,876	17.30
Delta	1	1,213	w
Fremont	1	235	w
Gunnison	2	8,067	w
La Plata	1	285	w
Mesa	1	398	w
Moffat	2	8,034	w
Montrose	1	322	w
Rio Blanco	1	1,723	w
Routt	2	9,600	w
Illinois	24	40,162	22.86
Gallatin	2	2,811	w
Jackson	2	478	w
Jefferson	1	3,860	w
Logan	1	2,365	w
Macoupin	3	6,068	w
McDonough	1	516	w
Perry	3	3,636	w
Randolph	1	2,535	w
Saline	5	8,918	\$22.58
Schuyler	1	410	w
Vermilion	1	793	w
Wabash	1	1,389	w
Washington	1	4,329	w
White	1	2,056	w
Indiana	37	36,700	19.68
Clay	3	2,196	w
Daviess	4	3,099	\$20.89
Dubois	1	250	w
Gibson	3	5,318	w
Greene	3	2,410	w
Knox	7	5,231	\$21.71
Owen	2	541	w
Parke	1	90	w
Pike	5	5,254	\$17.44
Spencer	1	216	w
Sullivan	2	4,681	w
Vigo	1	3,066	w
Warrick	4	4,348	\$18.87
Kansas	2	334	w
Linn	2	334	w
Kentucky	428	149,971	23.82
Bell	20	4,753	\$24.01
Breathitt	4	4,110	22.72
Christian	1	228	w
Clay	5	314	\$22.94
Daviess	1	882	w
Floyd	30	6,129	\$22.91
Harlan	34	8,213	25.36
Henderson	4	2,022	19.29
Hopkins	11	6,389	20.24
Johnson	4	1,057	24.12
Knott	39	9,014	23.57
Knox	13	550	37.63
Lawrence	5	275	25.16

See footnotes at end of table.

Table 84. Coal Disposition, Number of Mines, and Average Price, by State and County, 1998 (Continued)
(Thousand Short Tons, Nominal Dollars per Short Ton)

Coal-Producing State and County	Number of Mines	Disposition	Average Mine Price
Kentucky (Continued)			
Leslie.....	14	9,861	\$24.89
Letcher.....	33	9,883	25.12
Magoffin.....	2	860	w
Martin.....	31	12,940	\$24.43
McLean.....	3	1,763	w
Muhlenberg.....	5	3,179	\$17.46
Ohio.....	1	341	w
Owsley.....	2	48	w
Perry.....	30	14,540	\$22.60
Pike.....	121	35,013	25.72
Union.....	3	7,197	w
Webster.....	7	10,152	\$21.74
Whitley.....	5	258	33.36
Louisiana.....	2	3,331	w
De Soto.....	1	2,342	w
Red River.....	1	989	w
Maryland.....	11	4,029	24.35
Allegany.....	5	471	\$24.18
Garrett.....	6	3,558	24.40
Missouri.....	4	373	20.78
Barton.....	1	112	w
Bates.....	3	261	w
Montana.....	6	42,653	8.25
Big Horn.....	3	28,350	w
Richland.....	1	331	w
Rosebud.....	2	13,971	w
New Mexico.....	7	28,057	20.68
Colfax.....	1	1,339	w
McKinley.....	2	11,643	w
San Juan.....	4	15,075	\$20.04
North Dakota.....	4	30,475	8.01
McLean.....	1	7,047	w
Mercer.....	2	19,190	w
Oliver.....	1	4,239	w
Ohio.....	64	28,473	27.56
Belmont.....	9	7,065	\$19.91
Carroll.....	3	138	w
Columbiana.....	5	666	\$13.63
Coshocton.....	4	278	22.84
Gallia.....	1	400	w
Guernsey.....	3	150	w
Harrison.....	6	2,294	\$22.00
Jackson.....	3	1,648	w
Jefferson.....	5	679	\$22.67
Meigs.....	2	5,296	w
Monroe.....	1	2,441	w
Morgan.....	1	1,700	w
Muskingum.....	3	907	w
Noble.....	1	774	w
Perry.....	5	1,177	\$21.52
Stark.....	3	498	w
Tuscarawas.....	6	963	\$17.89
Vinton.....	3	1,399	w
Oklahoma.....	6	1,726	26.02
Craig.....	1	189	w
Haskell.....	1	641	w
Latimer.....	1	302	w
Le Flore.....	2	383	w
Nowata.....	1	212	w
Pennsylvania.....	254	80,299	25.87
Allegheny.....	1	16	w
Armstrong.....	24	6,035	\$24.22
Butler.....	3	576	w
Cambria.....	16	2,173	\$26.76
Carbon.....	1	299	w
Clarion.....	5	479	\$23.76
Clearfield.....	37	4,812	24.74
Columbia.....	5	1,165	30.49
Elk.....	5	753	24.03
Fayette.....	8	411	22.94

See footnotes at end of table.

**Table 84. Coal Disposition, Number of Mines, and Average Price,
by State and County, 1998 (Continued)**
(Thousand Short Tons, Nominal Dollars per Short Ton)

Coal-Producing State and County	Number of Mines	Disposition	Average Mine Price
Pennsylvania (Continued)			
Greene	12	37,186	\$24.93
Indiana	27	5,248	27.74
Jefferson	15	1,414	24.30
Lackawanna.....	1	28	w
Lawrence	2	102	w
Luzerne.....	6	914	\$60.22
Lycoming	1	314	w
Northumberland	5	221	\$48.37
Schuylkill	37	2,304	45.20
Somerset	28	5,047	19.63
Sullivan	1	37	w
Venango	1	98	w
Washington	6	10,176	\$25.77
Westmoreland	7	491	22.85
Tennessee	21	2,682	28.69
Anderson	1	15	w
Campbell	8	831	\$30.64
Claiborne	6	938	24.29
Cumberland.....	1	83	w
Fentress	1	224	w
Morgan	1	11	w
Scott.....	1	47	w
Sequatchie	2	532	w
Texas.....	14	53,314	12.47
Atascosa	1	3,522	w
Freestone	1	5,014	w
Harrison.....	2	4,134	w
Hopkins	1	2,244	w
Leon.....	1	8,832	w
Milam	1	6,255	w
Panola.....	2	8,655	w
Robertson	1	1,755	w
Rusk.....	1	5,042	w
Titus.....	2	7,590	w
Webb	1	269	w
Utah	15	27,393	18.47
Carbon	10	10,105	\$21.36
Emery	4	11,027	w
Sevier.....	1	6,261	w
Virginia.....	149	33,455	28.69
Alleghany	1	109	w
Buchanan	55	12,537	\$29.56
Dickenson.....	18	3,161	30.36
Lee.....	5	1,228	w
Russell.....	6	1,209	\$31.44
Tazewell	10	1,490	32.77
Wise.....	54	13,721	26.45
Washington	2	4,340	w
King.....	1	16	w
Lewis.....	1	4,324	w
West Virginia.....	314	174,586	27.07
Barbour.....	5	1,669	\$23.45
Boone.....	38	29,048	27.79
Braxton.....	1	538	w
Brooke	1	1,970	w
Clay	4	6,651	\$27.60
Fayette	6	3,609	30.12
Grant.....	4	1,299	27.70
Greenbrier	3	522	w
Harrison	8	6,478	\$27.67
Kanawha.....	16	14,542	22.42
Lincoln	1	24	w
Logan.....	27	14,305	\$21.79
Marion	2	5,406	w
Marshall.....	2	11,494	w
McDowell.....	63	6,041	\$31.24
Mineral	2	94	w
Mingo	39	25,456	\$29.04
Monongalia	7	6,845	22.06
Nicholas.....	10	2,696	31.23

See footnotes at end of table.

**Table 84. Coal Disposition, Number of Mines, and Average Price,
by State and County, 1998 (Continued)**
(Thousand Short Tons, Nominal Dollars per Short Ton)

Coal-Producing State and County	Number of Mines	Disposition	Average Mine Price
West Virginia (Continued)			
Preston	5	1,525	\$16.93
Raleigh	21	12,528	32.22
Randolph	2	59	w
Tucker	1	180	w
Upshur	9	2,195	\$22.90
Wayne	6	4,409	25.95
Webster	7	4,712	19.72
Wyoming	24	10,293	29.66
Wyoming	23	314,975	5.41
Campbell	14	274,013	\$4.62
Carbon	3	3,767	w
Converse	2	23,383	w
Lincoln	1	4,736	w
Sheridan	1	62	w
Sweetwater	2	9,013	w
U.S. Total	1,451	1,122,809	17.67

^w Withheld to avoid disclosure of individual company data.

Notes: Average price is calculated by dividing the total free on board (f.o.b.) rail/barge value of the coal sold by the total coal sold. Excludes mines producing less than 10,000 short tons, which are not required to provide data. Coal production excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 85. Average Price by State and Coal Rank, 1998
(Nominal Dollars per Short Ton)

Coal-Producing State and Region	Bituminous	Subbituminous	Lignite	Anthracite	Total
Alabama.....	\$37.23	-	-	-	\$37.23
Alaska.....	-	w	-	-	w
Arizona.....	w	w	-	-	w
Arkansas.....	-	-	-	w	w
Colorado.....	w	w	-	-	\$17.30
Illinois.....	\$22.86	-	-	-	22.86
Indiana.....	19.68	-	-	-	19.68
Kansas.....	w	-	-	-	w
Kentucky Total.....	\$23.82	-	-	-	\$23.82
Eastern.....	24.59	-	-	-	24.59
Western.....	21.01	-	-	-	21.01
Louisiana.....	-	-	w	-	w
Maryland.....	24.38	-	-	-	\$24.38
Missouri.....	20.78	-	-	-	20.78
Montana.....	-	w	w	-	8.25
New Mexico.....	w	w	-	-	20.68
North Dakota.....	-	-	\$8.01	-	8.01
Ohio.....	\$27.56	-	-	-	27.56
Oklahoma.....	26.02	-	-	-	26.02
Pennsylvania Total.....	24.75	-	-	\$42.91	25.88
Anthracite.....	-	-	-	42.91	42.91
Bituminous.....	24.75	-	-	-	24.75
Tennessee.....	28.69	-	-	-	28.69
Texas.....	w	-	w	-	12.47
Utah.....	\$18.47	-	-	-	18.47
Virginia.....	28.69	-	-	-	28.69
Washington.....	w	w	-	-	w
West Virginia Total.....	\$27.07	-	-	-	\$27.07
Northern.....	25.62	-	-	-	25.62
Southern.....	27.57	-	-	-	27.57
Wyoming.....	w	w	-	-	5.41
Appalachian Total¹.....	26.68	-	-	42.91	26.85
Interior Total¹.....	21.34	-	12.74	w	18.45
Western Total¹.....	19.33	6.96	8.03	-	8.76
East of Miss. River.....	25.63	-	-	42.91	25.78
West of Miss. River.....	19.52	6.96	11.08	w	9.25
U.S. Total.....	24.87	6.96	11.08	² 42.91	17.67

¹ For a definition of coal-producing regions, see Appendix C.

² Does not include Arkansas.

^w Withheld to avoid disclosure of individual company data.

Notes: Average price is calculated by dividing the total free on board (f.o.b.) rail/barge value of the coal sold by the total coal sold. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 86. Average Price of U.S. Coal by Mine Production Range and Mine Type, 1998
(Nominal Dollars per Short Ton)

Mine Production Range (thousand short tons)	Underground	Surface	Total
Over 1,000	\$25.48	\$10.37	\$15.28
500 to 1,000	26.32	24.41	25.35
200 to 500	25.04	23.96	24.56
100 to 200	25.90	24.62	25.38
50 to 100	26.78	24.75	25.93
10 to 50	28.85	24.20	25.87
U.S. Total	25.64	12.92	17.67

Notes: Average price is calculated by dividing the total free on board (f.o.b.) rail/barge value of the coal sold by the total coal sold. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 87. Average Price of U.S. Coal by Coalbed Thickness and Mine Type, 1998
(Nominal Dollars per Short Ton)

Coalbed Thickness (inches)	Underground	Surface	Total
< 7	-	\$33.23	\$33.23
7-12	\$22.00	22.71	22.50
13-18	-	24.68	24.68
19-24	42.79	21.70	22.12
25-30	25.57	21.86	22.42
31-36	26.69	25.33	26.09
37-42	27.70	23.01	25.61
43-48	28.94	24.91	27.29
49-54	24.24	21.34	22.96
55-60	28.61	23.24	27.09
61-66	25.30	20.68	24.17
67-72	28.08	21.73	26.43
73-78	25.03	16.48	22.83
79-84	25.36	18.97	23.30
85-90	25.60	20.85	22.94
91-96	23.96	23.27	23.85
97-102	24.42	17.45	18.83
103-108	24.50	16.50	17.53
109-114	16.52	22.06	17.69
115-120	18.69	23.56	19.79
> 120	17.22	7.22	7.78
U.S. Total	25.64	12.92	17.67

Notes: Average price is calculated by dividing the total free on board (f.o.b.) rail/barge value of the coal sold by the total coal sold. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 88. Average Price of Coal by State and Productivity Range, 1998
(Nominal Dollars per Short Ton)

Coal-Producing State and Region	Productivity Range (short tons per miner per hour)					Total
	> = 16	8 to 16	4 to 8	2 to 4	0 to 2	
Alabama.....	-	-	w	\$36.88	\$38.86	\$37.23
Alaska.....	-	-	w	-	-	w
Arizona.....	-	-	w	-	-	w
Arkansas.....	-	-	-	-	w	w
Colorado.....	-	\$16.15	\$20.32	w	-	\$17.30
Illinois.....	-	w	22.29	\$24.56	w	22.86
Indiana.....	\$21.48	w	19.50	21.73	w	19.68
Kansas.....	-	-	w	-	-	w
Kentucky Total.....	23.90	\$24.02	\$23.63	23.92	\$26.00	\$23.82
Eastern.....	23.90	w	24.41	24.94	w	24.59
Western.....	-	w	21.11	20.87	w	21.01
Louisiana.....	-	w	-	-	-	w
Maryland.....	-	-	w	25.09	\$23.62	w
Missouri.....	-	-	w	19.06	w	\$20.78
Montana.....	w	w	-	-	-	8.25
New Mexico.....	-	w	w	-	-	20.68
North Dakota.....	w	w	-	-	-	8.01
Ohio.....	w	w	\$20.69	39.30	\$18.36	27.56
Oklahoma.....	-	-	w	27.98	-	26.02
Pennsylvania Total.....	\$28.18	\$26.68	\$24.32	26.25	39.13	25.88
Anthracite.....	28.47	59.64	31.45	33.87	56.40	42.91
Bituminous.....	26.67	23.41	24.18	26.02	31.37	24.75
Tennessee.....	-	-	w	26.91	30.35	w
Texas.....	w	13.01	w	w	-	\$12.47
Utah.....	-	w	\$19.94	w	w	18.47
Virginia.....	\$27.02	w	w	\$28.77	\$30.56	28.69
Washington.....	-	-	w	-	w	w
West Virginia Total.....	w	w	\$26.88	28.74	\$28.05	\$27.07
Northern.....	-	w	26.16	27.48	w	25.62
Southern.....	w	\$27.57	27.21	29.23	w	27.57
Wyoming.....	\$4.61	16.39	w	19.69	w	5.41
Appalachian Total¹.....	25.50	26.22	25.45	29.25	33.57	26.85
Interior Total¹.....	9.29	14.01	20.05	22.65	24.19	18.45
Western Total¹.....	5.25	16.64	21.76	20.96	17.33	8.76
East of Miss. River.....	25.47	25.76	24.39	28.06	33.39	25.78
West of Miss. River.....	5.31	15.60	20.13	23.24	18.06	9.25
U.S. Total.....	5.64	19.15	23.79	27.95	32.56	17.67

¹ For a definition of coal-producing regions, see Appendix C.

w Withheld to avoid disclosure of individual company data.

Notes: Average price is calculated by dividing the total free on board (f.o.b.) rail/barge value of the coal sold by the total coal sold. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 89. Average Price of Underground Coal by State and Productivity Range, 1998
(Nominal Dollars per Short Ton)

Coal-Producing State and Region	Productivity Range (short tons per miner per hour)					
	> = 16	8 to 16	4 to 8	2 to 4	0 to 2	Total
Alabama.....	-	-	-	\$37.11	\$39.03	\$37.69
Colorado.....	-	w	\$20.69	w	-	16.38
Illinois.....	-	-	22.33	\$24.56	w	22.96
Indiana.....	-	-	w	w	-	w
Kentucky Total.....	w	\$25.30	\$24.19	\$24.04	\$26.53	\$24.23
Eastern.....	w	25.30	25.42	25.19	26.53	25.36
Western.....	-	-	21.35	w	-	21.23
Maryland.....	-	-	w	w	-	w
New Mexico.....	-	-	\$8.50	-	-	\$8.50
Ohio.....	-	-	w	w	-	28.48
Oklahoma.....	-	-	-	w	-	w
Pennsylvania Total.....	-	w	w	\$27.36	36.34	\$25.40
Anthracite.....	-	-	\$27.50	-	45.91	45.19
Bituminous.....	-	w	w	27.36	34.38	25.29
Tennessee.....	-	-	\$26.65	w	w	w
Utah.....	-	w	19.94	w	w	\$18.47
Virginia.....	-	\$30.00	29.91	\$29.20	\$30.64	29.55
West Virginia Total.....	w	w	27.88	29.13	28.41	28.25
Northern.....	-	w	26.33	27.88	w	26.14
Southern.....	w	\$29.61	29.07	29.54	w	29.28
Wyoming.....	-	w	-	-	-	w
Appalachian Total¹.....	29.14	27.17	26.29	29.50	33.48	27.65
Interior Total¹.....	-	-	21.96	23.00	21.85	22.33
Western Total¹.....	-	15.64	20.02	21.00	17.67	17.58
East of Miss. River.....	29.14	27.17	25.44	28.17	33.29	26.72
West of Miss. River.....	-	15.64	20.02	22.17	17.67	17.66
U.S. Total.....	29.14	22.06	24.98	28.05	32.39	25.64

¹ For a definition of coal-producing regions, see Appendix C.

w Withheld to avoid disclosure of individual company data.

Notes: Average price is calculated by dividing the total free on board (f.o.b.) rail/barge value of the coal sold by the total coal sold. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 90. Average Price of Surface Coal by State and Productivity Range, 1998
(Nominal Dollars per Short Ton)

Coal-Producing State and Region	Productivity Range (short tons per miner per hour)					
	> = 16	8 to 16	4 to 8	2 to 4	0 to 2	Total
Alabama.....	-	-	\$31.49	\$36.34	\$34.71	\$35.89
Alaska.....	-	-	w	-	-	w
Arizona.....	-	-	w	-	-	w
Arkansas.....	-	-	-	-	w	w
Colorado.....	-	w	w	-	-	\$19.14
Illinois.....	-	w	\$22.07	-	\$40.52	22.07
Indiana.....	\$21.48	w	19.36	18.71	w	w
Kansas.....	-	-	w	-	-	w
Kentucky Total.....	w	\$23.47	\$22.88	23.51	\$24.42	\$23.16
Eastern.....	w	23.68	23.30	24.18	24.45	23.57
Western.....	-	20.02	20.45	19.60	w	20.24
Louisiana.....	-	w	-	-	-	w
Maryland.....	-	-	w	25.89	\$23.62	w
Missouri.....	-	-	-	19.06	w	\$20.78
Montana.....	w	w	-	-	-	8.25
New Mexico.....	-	w	w	-	-	20.76
North Dakota.....	w	w	-	-	-	8.01
Ohio.....	\$19.11	\$23.45	\$21.29	37.62	\$18.36	26.61
Oklahoma.....	-	-	w	27.06	-	25.24
Pennsylvania Total.....	28.18	40.01	\$22.44	24.62	41.53	27.20
Anthracite.....	28.47	59.64	31.50	33.87	59.95	42.75
Bituminous.....	26.67	20.28	21.38	23.91	27.61	22.84
Tennessee.....	-	-	30.73	27.01	w	w
Texas.....	w	13.01	w	w	-	\$12.47
Virginia.....	\$27.02	-	w	\$26.54	\$27.95	26.21
Washington.....	-	-	\$24.91	-	w	w
West Virginia Total.....	-	w	24.63	26.31	\$22.00	\$24.50
Northern.....	-	w	18.99	26.29	w	21.88
Southern.....	-	\$24.66	24.77	26.34	w	24.79
Wyoming.....	4.61	w	w	19.69	w	w
Appalachian Total¹	24.95	25.03	23.85	28.55	33.87	25.31
Interior Total¹	9.29	14.01	18.39	20.80	26.09	16.05
Western Total¹	5.25	17.12	23.13	19.69	12.31	7.77
East of Miss. River	24.92	24.24	22.65	27.71	33.72	24.07
West of Miss. River	5.31	15.59	20.20	25.32	19.78	8.41
U.S. Total	5.59	17.74	22.11	27.63	33.13	12.92

¹ For a definition of coal-producing regions, see Appendix C.

^w Withheld to avoid disclosure of individual company data.

Notes: Average price is calculated by dividing the total free on board (f.o.b.) rail/barge value of the coal sold by the total coal sold. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 91. Average Price by State and Disposition, 1998
(Nominal Dollars per Short Ton)

Coal-Producing State and Region	Open Market ¹	Captive ²	Total
Alabama	w	w	37.23
Alaska.....	w	-	w
Arizona.....	w	-	w
Arkansas.....	w	-	w
Colorado.....	w	w	17.30
Illinois.....	w	w	22.86
Indiana.....	19.68	-	19.68
Kansas.....	w	-	w
Kentucky Total.....	23.81	29.59	23.82
Eastern.....	24.57	-	24.59
Western.....	21.01	*	21.01
Louisiana.....	w	-	w
Maryland.....	24.38	-	24.35
Missouri.....	20.78	-	20.78
Montana.....	w	w	8.25
New Mexico.....	w	w	20.68
North Dakota.....	w	w	8.01
Ohio.....	20.60	45.28	27.56
Oklahoma.....	26.02	-	26.02
Pennsylvania Total.....	25.82	28.44	25.87
Anthracite.....	48.01	29.03	42.91
Bituminous.....	24.74	26.67	24.75
Tennessee.....	w	w	28.69
Texas.....	w	w	12.47
Utah.....	w	w	18.47
Virginia.....	28.69	-	28.69
Washington.....	w	w	w
West Virginia Total.....	26.90	38.68	27.07
Northern.....	w	w	25.62
Southern.....	w	w	27.57
Wyoming.....	5.11	11.93	5.41
Appalachian Total³.....	26.26	41.09	26.85
Interior Total³.....	20.60	12.10	18.45
Western Total³.....	8.28	15.49	8.76
East of Miss. River.....	25.43	40.98	25.78
West of Miss. River.....	8.56	13.57	9.25
U.S. Total.....	17.68	17.65	17.67

¹ Open Market includes all coal sold on the open market to other coal companies or consumers.

² Captive includes all coal used by the producing company or sold to affiliated or parent companies.

³ For a definition of coal-producing regions, see Appendix C.

* Data round to zero.

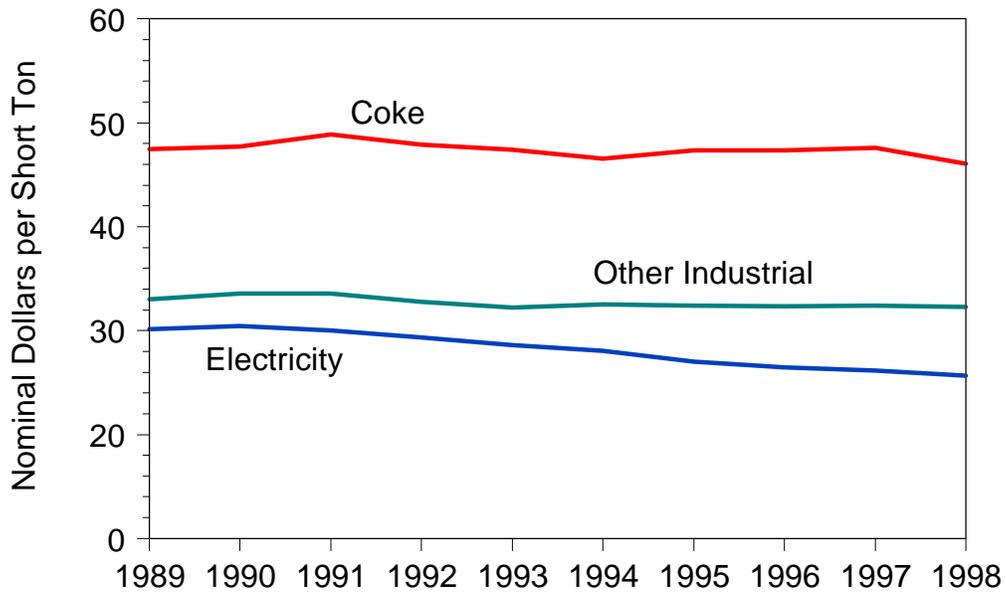
^w Withheld to avoid disclosure of individual company data.

Notes: Average price is calculated by dividing the total free on board (f.o.b.) rail/barge value of the coal sold by the total coal sold. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report" and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Consumer Prices

Figure 13. U.S. Coal Prices by Sector, 1989-1998



Sources: • Electric Utilities: Federal Energy Regulatory Commission (FERC), FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants." • Coke Plants: Energy Information Administration (EIA), Form EIA-5, "Coke Plant Report - Quarterly." • Industrial: Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants."

Table 92. Average Price of Coal Delivered to Electric Utilities by Census Division and State, 1989, 1994-1998
(Nominal Dollars per Short Ton)

Census Division and State	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
New England Total	\$42.94	\$43.67	\$43.55	\$43.34	\$42.81	\$44.54	-1.7	0.1	-0.4
Connecticut	47.59	50.02	50.05	49.33	46.45	56.88	-4.9	.6	-2.0
Massachusetts	42.30	42.72	42.64	42.63	43.00	41.68	-1.0	-4	.2
New Hampshire	42.35	42.62	42.23	41.67	39.66	46.18	-6	1.6	-9
Middle Atlantic Total	34.33	34.39	35.08	34.63	36.33	37.03	-2	-1.4	-8
New Jersey.....	41.71	45.94	45.53	47.17	48.49	46.84	-9.2	-3.7	-1.3
New York.....	37.44	37.32	37.15	36.86	37.63	40.32	.3	-1	-8
Pennsylvania.....	33.28	33.28	34.06	33.48	35.39	35.50	*	-1.5	-7
East North Central Total	27.51	27.68	28.29	29.67	30.56	34.10	-6	-2.6	-2.3
Illinois	30.22	30.41	32.14	32.58	32.69	38.78	-6	-1.9	-2.7
Indiana	23.63	24.35	24.67	25.94	26.79	29.08	-3.0	-3.1	-2.3
Michigan	28.19	28.93	29.34	30.95	32.90	38.83	-2.6	-3.8	-3.5
Ohio	32.52	31.41	32.31	34.44	34.70	35.21	3.5	-1.6	-9
Wisconsin.....	19.97	20.43	19.55	21.23	23.13	28.10	-2.2	-3.6	-3.7
West North Central Total	14.91	15.39	15.53	16.10	16.76	19.85	-3.1	-2.9	-3.1
Iowa	15.12	16.23	16.30	17.13	17.39	21.77	-6.8	-3.4	-4.0
Kansas	17.06	17.91	17.51	17.83	17.85	22.00	-4.7	-1.1	-2.8
Minnesota.....	19.00	19.47	18.99	20.12	20.09	21.01	-2.4	-1.4	-1.1
Missouri	16.40	16.80	17.31	18.14	21.39	28.00	-2.4	-6.4	-5.8
Nebraska.....	10.07	10.06	12.37	12.86	13.11	14.32	.1	-6.4	-3.8
North Dakota	10.01	10.21	9.72	9.65	9.28	9.13	-2.0	1.9	1.0
South Dakota	16.19	15.99	16.94	14.35	13.10	15.24	1.2	5.4	.7
South Atlantic Total	35.58	36.34	36.68	38.25	39.53	41.19	-2.1	-2.6	-1.6
Delaware.....	40.52	41.05	41.51	42.27	41.98	46.41	-1.3	-9	-1.5
Florida.....	40.03	41.82	42.40	43.93	43.71	44.26	-4.3	-2.2	-1.1
Georgia.....	36.31	37.28	36.54	38.62	39.82	42.96	-2.6	-2.3	-1.8
Maryland.....	37.63	38.75	38.49	39.00	39.84	40.92	-2.9	-1.4	-9
North Carolina.....	35.66	35.35	36.87	40.57	41.77	44.35	.9	-3.9	-2.4
South Carolina.....	37.05	37.21	37.54	38.86	39.84	43.08	-4	-1.8	-1.7
Virginia.....	34.73	34.98	35.73	36.90	37.05	39.29	-7	-1.6	-1.4
West Virginia.....	30.06	30.68	30.93	31.61	34.70	35.33	-2.0	-3.5	-1.8
East South Central Total	29.10	28.70	29.35	30.08	32.43	33.73	1.4	-2.7	-1.6
Alabama.....	36.28	35.58	36.39	37.00	40.42	44.84	1.9	-2.7	-2.3
Kentucky.....	24.52	24.20	24.43	25.71	27.16	26.13	1.3	-2.5	-7
Mississippi.....	32.51	32.44	33.31	34.40	35.54	42.29	.2	-2.2	-2.9
Tennessee.....	26.39	26.67	27.64	27.94	30.61	31.94	-1.0	-3.6	-2.1
West South Central Total	19.34	19.69	20.13	20.66	20.79	22.69	-1.8	-1.8	-1.8
Arkansas.....	25.53	28.56	26.15	27.99	27.91	28.45	-10.6	-2.2	-1.2
Louisiana.....	23.15	23.97	24.74	25.13	25.04	26.64	-3.4	-1.9	-1.5
Oklahoma.....	15.74	15.87	16.79	17.00	17.50	24.03	-8	-2.6	-4.6
Texas.....	18.61	18.69	19.26	19.65	19.84	21.12	-5	-1.6	-1.4
Mountain Total	20.83	21.52	21.82	21.51	21.83	21.80	-3.2	-1.2	-5
Arizona.....	27.12	28.95	29.55	28.65	28.26	28.81	-6.3	-1.0	-7
Colorado.....	19.41	19.93	20.24	20.73	21.01	20.95	-2.6	-2.0	-8
Montana.....	11.36	11.52	11.90	11.47	11.79	9.81	-1.3	-9	1.6
Nevada.....	29.07	31.10	30.44	29.02	32.37	33.80	-6.5	-2.6	-1.7
New Mexico.....	23.72	24.23	26.04	25.59	25.48	22.61	-2.1	-1.8	.5
Utah.....	25.97	25.22	24.66	25.27	26.10	28.05	3.0	-1	-8
Wyoming.....	13.83	14.16	14.30	14.29	14.09	14.86	-2.3	-4	-8
Pacific Total	23.07	25.19	23.96	22.83	21.93	25.40	-8.4	1.3	-1.1
Oregon.....	18.92	19.95	18.81	18.79	19.18	-	-5.2	-3	-
Washington.....	24.44	26.15	24.91	23.74	22.93	25.40	-6.5	1.6	-4
U.S. Total	25.64	26.16	26.45	27.01	28.03	30.15	-2.0	-2.2	-1.8

* Data round to zero.

Note: Average prices are based on the cost including insurance and freight.

Source: Federal Energy Regulatory Commission, FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

**Table 93. Average Real Price of Coal Delivered to Electric Utilities by
Census Division and State, 1989, 1994-1998**
(Real Dollars per Short Ton)

Census Division and State	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
New England Total	\$38.10	\$39.13	\$39.78	\$40.32	\$40.73	\$49.66	-2.6	-1.6	-2.9
Connecticut	42.22	44.82	45.71	45.89	44.20	63.41	-5.8	-1.1	-4.4
Massachusetts	37.53	38.28	38.94	39.66	40.92	46.47	-1.9	-2.1	-2.3
New Hampshire	37.57	38.19	38.56	38.76	37.74	51.48	-1.6	-1	-3.4
Middle Atlantic Total	30.46	30.81	32.04	32.21	34.56	41.28	-1.1	-3.1	-3.3
New Jersey.....	37.01	41.17	41.58	43.88	46.14	52.21	-10.1	-5.4	-3.8
New York.....	33.22	33.44	33.93	34.29	35.81	44.95	-6	-1.8	-3.3
Pennsylvania.....	29.53	29.82	31.11	31.15	33.67	39.58	-1.0	-3.2	-3.2
East North Central Total	24.41	24.81	25.83	27.60	29.08	38.02	-1.6	-4.3	-4.8
Illinois	26.81	27.25	29.35	30.30	31.11	43.23	-1.6	-3.6	-5.2
Indiana	20.96	21.82	22.53	24.13	25.49	32.42	-3.9	-4.8	-4.7
Michigan	25.01	25.92	26.79	28.79	31.30	43.29	-3.5	-5.4	-5.9
Ohio	28.85	28.14	29.51	32.03	33.01	39.25	2.5	-3.3	-3.4
Wisconsin.....	17.72	18.30	17.85	19.75	22.01	31.33	-3.2	-5.3	-6.1
West North Central Total	13.23	13.79	14.18	14.98	15.94	22.13	-4.0	-4.5	-5.5
Iowa	13.42	14.54	14.88	15.93	16.55	24.27	-7.7	-5.1	-6.4
Kansas	15.14	16.04	15.99	16.59	16.98	24.53	-5.6	-2.8	-5.2
Minnesota.....	16.86	17.45	17.35	18.72	19.11	23.42	-3.4	-3.1	-3.6
Missouri	14.55	15.05	15.81	16.88	20.35	31.22	-3.4	-8.0	-8.1
Nebraska.....	8.93	9.01	11.30	11.97	12.48	15.97	-9	-8.0	-6.2
North Dakota	8.88	9.15	8.88	8.98	8.83	10.18	-2.9	.1	-1.5
South Dakota	14.36	14.32	15.47	13.35	12.46	16.98	.3	3.6	-1.8
South Atlantic Total	31.57	32.56	33.50	35.58	37.61	45.92	-3.0	-4.3	-4.1
Delaware	35.95	36.78	37.91	39.32	39.94	51.74	-2.3	-2.6	-4.0
Florida.....	35.52	37.47	38.72	40.86	41.59	49.35	-5.2	-3.9	-3.6
Georgia.....	32.22	33.40	33.37	35.92	37.89	47.89	-3.5	-4.0	-4.3
Maryland.....	33.39	34.72	35.15	36.28	37.91	45.62	-3.8	-3.1	-3.4
North Carolina.....	31.64	31.68	33.67	37.74	39.74	49.45	-1	-5.5	-4.8
South Carolina.....	32.88	33.34	34.29	36.14	37.91	48.03	-1.4	-3.5	-4.1
Virginia.....	30.82	31.35	32.63	34.33	35.25	43.81	-1.7	-3.3	-3.8
West Virginia.....	26.67	27.49	28.24	29.40	33.02	39.39	-3.0	-5.2	-4.2
East South Central Total	25.82	25.72	26.80	27.98	30.86	37.61	.4	-4.4	-4.1
Alabama	32.19	31.88	33.23	34.42	38.46	49.98	.9	-4.3	-4.8
Kentucky.....	21.76	21.69	22.31	23.91	25.84	29.14	.3	-4.2	-3.2
Mississippi	28.85	29.07	30.42	32.00	33.81	47.15	-7	-3.9	-5.3
Tennessee.....	23.42	23.90	25.24	26.00	29.13	35.61	-2.0	-5.3	-4.5
West South Central Total	17.16	17.64	18.38	19.22	19.78	25.29	-2.7	-3.5	-4.2
Arkansas.....	22.65	25.59	23.89	26.03	26.55	31.72	-11.5	-3.9	-3.7
Louisiana.....	20.54	21.48	22.59	23.37	23.83	29.70	-4.4	-3.6	-4.0
Oklahoma.....	13.97	14.22	15.34	15.82	16.65	26.78	-1.8	-4.3	-7.0
Texas.....	16.51	16.75	17.59	18.28	18.87	23.55	-1.4	-3.3	-3.9
Mountain Total	18.48	19.28	19.93	20.01	20.77	24.31	-4.1	-2.9	-3.0
Arizona.....	24.06	25.94	26.98	26.65	26.89	32.12	-7.2	-2.7	-3.1
Colorado.....	17.22	17.86	18.48	19.28	19.99	23.36	-3.6	-3.6	-3.3
Montana	10.08	10.32	10.87	10.67	11.21	10.94	-2.3	-2.6	-9
Nevada.....	25.80	27.86	27.80	26.99	30.80	37.68	-7.4	-4.3	-4.1
New Mexico	21.05	21.71	23.78	23.81	24.24	25.20	-3.0	-3.5	-2.0
Utah.....	23.05	22.60	22.52	23.51	24.83	31.27	2.0	-1.8	-3.3
Wyoming	12.27	12.69	13.06	13.29	13.40	16.57	-3.3	-2.2	-3.3
Pacific Total	20.47	22.57	21.89	21.24	20.87	28.32	-9.3	-5	-3.5
Oregon	16.79	17.88	17.17	17.48	18.25	-	-6.1	-2.1	-
Washington.....	21.68	23.43	22.75	22.08	21.81	28.32	-7.4	-1	-2.9
U.S. Total	22.75	23.44	24.16	25.12	26.67	33.61	-2.9	-3.9	-4.2

Notes: Real prices are in 1992 dollars, calculated using implicit Gross Domestic Product price deflators. See Appendix D, Table D2. Average prices are based on the cost including insurance and freight.

Source: Federal Energy Regulatory Commission, FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

Table 94. Average Price of Coal Delivered to Other Industrial Plants By Census Division and State, 1989, 1994-1998
(Nominal Dollars per Short Ton)

Census Division and State	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
New England Total	w	\$63.46	\$57.36	\$56.90	\$55.73	\$64.78	w	w	w
Maine.....	w	w	w	w	w	w	w	w	w
Massachusetts.....	w	w	w	w	w	w	w	w	w
New Hampshire.....	-	-	-	-	-	w	-	-	-
Vermont.....	-	-	-	-	-	w	-	-	-
Middle Atlantic Total	\$36.53	w	w	w	w	w	w	w	w
New Jersey.....	w	w	w	w	w	w	w	w	w
New York.....	w	\$41.52	\$40.11	\$41.91	\$42.20	\$43.81	w	w	w
Pennsylvania.....	\$34.33	34.20	33.84	34.07	33.66	35.93	0.4	0.5	-0.5
East North Central Total	33.22	33.53	34.44	34.89	34.72	35.34	-9	-1.1	-7
Illinois.....	29.46	29.76	29.69	29.03	29.13	31.17	-1.0	.3	-6
Indiana.....	30.21	29.75	31.76	33.14	31.35	32.88	1.5	-9	-9
Michigan.....	40.40	41.94	41.28	41.18	41.20	41.46	-3.6	-5	-3
Ohio.....	33.52	34.05	35.28	35.18	35.75	33.79	-1.5	-1.6	-1
Wisconsin.....	40.42	40.03	40.02	40.21	41.23	42.18	1.0	-5	-5
West North Central Total	18.72	19.02	19.05	18.92	18.61	18.02	-1.6	.1	.4
Iowa.....	28.19	28.92	29.32	29.24	28.52	30.86	-2.5	-3	-1.0
Kansas.....	31.08	31.93	32.46	32.42	32.25	28.41	-2.6	-9	1.0
Minnesota.....	29.70	31.03	28.85	34.40	35.66	36.51	-4.3	-4.5	-2.3
Missouri.....	30.48	30.06	31.37	32.81	32.87	29.56	1.4	-1.9	.3
Nebraska.....	w	w	w	w	w	w	w	w	w
North Dakota.....	w	w	w	w	w	w	w	w	w
South Dakota.....	\$23.99	\$23.36	\$24.90	\$22.21	\$21.78	\$15.70	2.7	2.4	4.8
South Atlantic Total	w	w	w	w	w	w	w	w	w
Delaware.....	w	w	w	w	w	w	w	w	w
Florida.....	\$44.62	\$45.13	\$45.69	\$46.63	\$46.60	\$46.05	-1.1	-1.1	-3
Georgia.....	44.54	44.84	44.21	44.64	45.71	42.97	-6	-6	.4
Maryland.....	32.41	32.62	32.52	31.66	32.18	31.62	-6	.2	.3
North Carolina.....	42.72	43.14	43.36	43.29	43.62	42.63	-1.0	-5	*
South Carolina.....	44.03	44.23	44.08	43.16	43.84	42.18	-4	.1	.5
Virginia.....	43.60	43.85	43.51	42.50	41.56	38.92	-5	1.2	1.3
West Virginia.....	48.24	35.31	33.37	33.61	32.73	30.85	36.6	10.2	5.1
East South Central Total	w	w	w	w	w	w	w	w	w
Alabama.....	\$39.49	\$40.20	\$40.15	\$39.53	\$38.74	\$40.36	-1.8	.5	-2
Kentucky.....	43.66	44.71	44.02	44.09	43.22	45.27	-2.3	.3	-4
Mississippi.....	w	w	w	w	w	w	w	w	w
Tennessee.....	\$36.62	\$36.33	\$35.21	\$35.68	\$35.34	\$34.57	.8	.9	.6
West South Central Total	22.91	22.42	21.79	22.04	22.95	23.04	2.2	*	-1
Arkansas.....	41.58	42.38	43.24	43.52	44.28	44.31	-1.9	-1.6	-7
Louisiana.....	w	w	w	w	w	w	w	w	w
Oklahoma.....	w	w	w	w	w	w	w	w	w
Texas.....	\$21.05	\$20.13	\$18.99	\$18.76	\$19.54	\$18.45	4.6	1.9	1.5
Mountain Total	w	27.14	26.70	27.06	28.78	28.73	w	w	w
Arizona.....	\$38.67	38.81	39.27	40.46	41.35	39.78	-3	-1.6	-3
Colorado.....	23.75	w	w	w	w	w	w	w	w
Idaho.....	34.31	\$34.57	\$36.39	\$34.11	\$33.35	\$32.52	-7	.7	.6
Montana.....	w	w	w	w	w	w	w	w	w
Nevada.....	w	w	w	w	w	w	w	w	w
New Mexico.....	w	w	w	w	w	w	w	w	w
Utah.....	\$19.05	\$19.28	\$19.10	\$19.74	\$26.57	\$26.79	-1.2	-8.0	-3.7
Wyoming.....	24.10	23.68	22.32	22.72	22.87	24.14	1.8	1.3	*
Pacific Total	43.12	43.24	42.45	43.68	44.92	44.12	-3	-1.0	-3
California.....	41.02	40.14	39.54	41.11	43.39	43.74	2.2	-1.4	-7
Hawaii.....	w	w	w	w	w	w	w	w	w
Oregon.....	w	w	w	w	w	w	w	w	w
Washington.....	w	\$59.80	\$58.81	\$59.15	\$58.86	\$49.50	w	w	w
U.S. Total	\$32.30	32.41	32.32	32.42	32.55	33.03	-3	-2	-2

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

Notes: Price data are for manufacturing plants only. Average prices are based on the cost including insurance, freight, and taxes.

Source: Energy Information Administration, Form EIA-3, "Quarterly Coal Consumption - Manufacturing Plants."

Table 95. Average Real Price of Coal Delivered to Other Industrial Plants by Census Division and State, 1989, 1994-1998
(Real 1992 Dollars per Short Ton)

Census Division and State	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
New England Total	w	\$56.86	\$52.38	\$52.93	\$53.03	\$72.22	w	w	w
Maine.....	w	w	w	w	w	w	w	w	w
Massachusetts.....	w	w	w	w	w	w	w	w	w
New Hampshire.....	-	-	-	-	-	w	-	-	-
Vermont.....	-	-	-	-	-	w	-	-	-
Middle Atlantic Total	\$32.42	w	w	w	w	w	w	w	w
New Jersey.....	w	w	w	w	w	w	w	w	w
New York.....	\$37.22	\$37.20	\$36.63	\$38.98	\$40.15	\$48.85	*	-1.9	-3.0
Pennsylvania.....	30.46	30.64	30.90	31.69	32.03	40.06	-0.6	-1.2	-3.0
East North Central Total	29.47	30.04	31.45	32.45	33.03	39.39	-1.9	-2.8	-3.2
Illinois.....	26.14	26.66	27.11	27.01	27.71	34.75	-2.0	-1.4	-3.1
Indiana.....	26.81	26.66	29.01	30.83	29.83	36.66	.5	-2.6	-3.4
Michigan.....	35.85	37.58	37.70	38.30	39.20	46.22	-4.6	-2.2	-2.8
Ohio.....	29.74	30.51	32.22	32.73	34.01	37.67	-2.5	-3.3	-2.6
Wisconsin.....	35.86	35.86	36.55	37.40	39.23	47.02	*	-2.2	-3.0
West North Central Total	16.61	17.05	17.39	17.60	17.71	20.09	-2.5	-1.6	-2.1
Iowa.....	25.02	25.91	26.78	27.20	27.13	34.41	-3.5	-2.0	-3.5
Kansas.....	27.58	28.61	29.64	30.16	30.68	31.68	-3.6	-2.6	-1.5
Minnesota.....	26.35	27.81	26.35	32.00	33.93	40.71	-5.2	-6.1	-4.7
Missouri.....	27.05	26.94	28.65	30.52	31.28	32.96	.4	-3.6	-2.2
Nebraska.....	w	w	w	w	w	w	w	w	w
North Dakota.....	w	w	w	w	w	w	w	w	w
South Dakota.....	\$21.29	\$20.93	\$22.74	\$20.66	\$20.72	\$17.50	1.7	.7	2.2
South Atlantic Total	w	w	w	w	w	w	w	w	w
Delaware.....	w	w	w	w	w	w	w	w	w
Florida.....	\$39.59	\$40.44	\$41.72	\$43.38	\$44.34	\$51.34	-2.1	-2.8	-2.8
Georgia.....	39.52	40.18	40.37	41.52	43.49	47.91	-1.6	-2.4	-2.1
Maryland.....	28.76	29.23	29.70	29.45	30.61	35.25	-1.6	-1.5	-2.2
North Carolina.....	37.90	38.65	39.60	40.27	41.50	47.53	-1.9	-2.2	-2.5
South Carolina.....	39.07	39.63	40.25	40.15	41.71	47.02	-1.4	-1.6	-2.0
Virginia.....	38.69	39.29	39.73	39.53	39.55	43.39	-1.5	-.5	-1.3
West Virginia.....	42.81	31.64	30.47	31.27	31.14	34.39	35.3	8.3	2.5
East South Central Total	w	w	w	w	w	w	w	w	w
Alabama.....	\$35.04	\$36.02	\$36.67	\$36.77	\$36.86	\$45.00	-2.7	-1.3	-2.7
Kentucky.....	38.74	40.06	40.20	41.01	41.12	50.47	-3.3	-1.5	-2.9
Mississippi.....	w	w	w	w	w	w	w	w	w
Tennessee.....	\$32.49	\$32.56	\$32.16	\$33.19	\$33.63	\$38.54	-2	-.8	-1.9
West South Central Total	20.33	20.09	19.90	20.50	21.83	25.69	1.2	-1.8	-2.6
Arkansas.....	36.89	37.97	39.49	40.48	42.13	49.40	-2.8	-3.3	-3.2
Louisiana.....	w	w	w	w	w	w	w	w	w
Oklahoma.....	w	w	w	w	w	w	w	w	w
Texas.....	\$18.67	\$18.03	\$17.34	\$17.45	\$18.59	\$20.57	3.5	.1	-1.1
Mountain Total	w	24.31	24.39	25.17	27.39	32.03	w	w	w
Arizona.....	\$34.32	34.77	35.87	37.64	39.34	44.35	-1.3	-3.3	-2.8
Colorado.....	21.07	22.52	21.16	24.29	27.55	31.00	-6.4	-6.5	-4.2
Idaho.....	30.45	w	w	w	w	w	w	w	w
Montana.....	w	w	w	w	w	w	w	w	w
Nevada.....	w	w	w	w	w	w	w	w	w
New Mexico.....	w	w	w	w	w	w	w	w	w
Utah.....	\$16.90	\$17.27	\$17.45	\$18.36	\$25.28	\$29.86	-2.1	-9.6	-6.1
Wyoming.....	21.39	21.22	20.39	21.14	21.76	26.92	.8	-.4	-2.5
Pacific Total	38.26	38.75	38.76	40.64	42.74	49.18	-1.3	-2.7	-2.8
California.....	36.40	35.97	36.11	38.24	41.29	48.76	1.2	-3.1	-3.2
Hawaii.....	w	w	w	w	w	w	w	w	w
Oregon.....	w	w	w	w	w	w	w	w	w
Washington.....	w	\$53.59	\$53.71	\$55.02	\$56.01	\$55.19	w	w	w
U.S. Total	\$28.66	29.04	29.52	30.16	30.97	36.82	-1.3	-1.9	-2.7

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

Notes: Price data are for manufacturing plants only. Real prices are in 1992 dollars, calculated using implicit Gross Domestic Product price deflators. See Appendix D, Table D2. Average prices are based on the cost including insurance, freight, and taxes.

Source: Energy Information Administration, Form EIA-3, "Quarterly Coal Consumption - Manufacturing Plants."

Table 96. Average Price of Coal Delivered to Coke Plants by Census Division and State, 1989, 1994-1998
(Nominal Dollars per Short Ton)

Census Division and State	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Middle Atlantic Total	\$44.16	w	w	w	w	w	w	w	w
New York	w	w	w	w	w	w	w	w	w
Pennsylvania	w	\$46.20	\$45.16	\$46.11	\$46.25	\$44.77	w	w	w
East North Central Total	\$48.39	49.12	49.54	49.09	47.23	49.56	-1.5	0.6	-0.3
Illinois	w	w	w	w	w	w	w	w	w
Indiana	w	\$50.75	\$51.93	\$52.74	\$50.90	\$51.47	w	w	w
Michigan	w	w	w	w	w	w	w	w	w
Ohio	w	\$46.89	\$44.98	\$42.18	\$42.02	\$47.02	w	w	w
South Atlantic Total	w	w	w	w	w	w	w	w	w
Maryland	-	-	-	-	-	w	-	-	-
Virginia	w	w	w	w	w	w	w	w	w
West Virginia.....	w	w	w	w	w	w	w	w	w
East South Central Total	\$46.43	w	w	w	w	w	w	w	w
Alabama	w	\$50.04	\$49.37	\$48.42	\$47.45	\$46.67	w	w	w
Kentucky	w	w	w	w	w	w	w	w	w
Tennessee.....	-	-	-	-	-	w	-	-	-
Mountain Total	w	w	w	w	w	w	w	w	w
Utah.....	w	w	w	w	w	w	w	w	w
U.S. Total	\$46.06	\$47.61	\$47.33	\$47.34	\$46.56	\$47.50	-3.3	-3	-3

^w Withheld to avoid disclosure of individual company data.
Note: Average prices are based on the cost including insurance, freight, and taxes.
Source: Energy Information Administration, Form EIA-5, "Coke Plant Report - Quarterly."

Table 97. Average Real Price of Coal Delivered to Coke Plants by Census Division and State, 1989, 1994-1998
(Real 1992 Dollars per Short Ton)

Census Division and State	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Middle Atlantic Total	\$39.18	w	w	w	w	w	w	w	w
New York	w	w	w	w	w	w	w	w	w
Pennsylvania	w	\$41.40	\$41.25	\$42.89	\$44.00	\$49.92	w	w	w
East North Central Total	\$42.93	44.01	45.24	45.67	44.94	55.25	-2.4	-1.1	-2.8
Illinois	w	w	w	w	w	w	w	w	w
Indiana	w	\$45.48	\$47.43	\$49.06	\$48.43	\$57.38	w	w	w
Michigan	w	w	w	w	w	w	w	w	w
Ohio	w	\$42.02	\$41.08	\$39.24	\$39.98	\$52.42	w	w	w
South Atlantic Total	w	w	w	w	w	w	w	w	w
Maryland	-	-	-	-	-	w	-	-	-
Virginia	w	w	w	w	w	w	w	w	w
West Virginia.....	w	w	w	w	w	w	w	w	w
East South Central Total	\$41.20	w	w	w	w	w	w	w	w
Alabama	w	\$44.84	\$45.08	\$45.04	\$45.15	\$52.03	w	w	w
Kentucky	w	w	w	w	w	w	w	w	w
Tennessee.....	-	-	-	-	-	w	-	-	-
Mountain Total	w	w	w	w	w	w	w	w	w
Utah.....	w	w	w	w	w	w	w	w	w
U.S. Total	\$40.87	\$42.66	\$43.22	\$44.04	\$44.30	\$52.95	-4.2	-2.0	-2.8

^w Withheld to avoid disclosure of individual company data.
Notes: Real prices are in 1992 dollars, calculated using implicit Gross Domestic Product price deflators. See Appendix D, Table D2. Average prices are based on the cost including insurance, freight, and taxes.
Source: Energy Information Administration, Form EIA-5, "Coke Plant Report - Quarterly."

Import/Export Prices

Table 98. Average Price of U.S. Coal Imports by Continent and Country of Origin, 1989, 1994-1998
(Nominal Dollars per Short Ton)

Continent and Country of Origin	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
North America Total	\$35.38	\$38.11	^R \$36.51	^R \$36.87	^R \$32.64	\$26.65	-7.2	2.0	3.2
Canada	35.40	38.11	^R 36.52	^R 36.94	^R 32.71	26.35	-7.1	2.0	3.3
Mexico	20.87	-	33.43	20.87	20.87	31.26	-	-	-4.4
South America Total	31.16	32.49	^R 31.53	^R 32.38	^R 29.51	35.06	-4.1	1.4	-1.3
Colombia.....	31.21	32.11	^R 31.90	^R 31.26	^R 28.39	35.49	-2.8	2.4	-1.4
Venezuela.....	31.09	33.26	^R 30.87	^R 34.70	^R 32.09	33.48	-6.5	-8	-8
Europe Total	36.80	49.22	-	25.70	-	44.34	-25.2	-	-2.0
Netherlands	-	-	-	-	-	44.34	-	-	-100.0
Norway.....	-	49.45	-	-	-	-	-100.0	-	-
Spain	36.48	-	-	-	-	-	-	-	-
Switzerland	-	41.20	-	-	-	-	-100.0	-	-
United Kingdom	42.03	-	-	25.70	-	-	-	-	-
Asia Total	34.13	33.05	32.45	35.13	34.09	-	3.2	*	-
Indonesia.....	34.13	32.82	32.45	35.13	33.80	-	4.0	.2	-
Vietnam.....	-	49.09	-	-	48.08	-	-100.0	-100.0	-
Oceania & Australia Total	31.89	33.47	33.41	33.57	31.16	34.44	-4.7	.6	-8
Australia.....	31.89	33.47	33.41	30.99	30.02	34.44	-4.7	1.5	-8
New Zealand.....	-	-	-	46.42	44.15	-	-	-100.0	-
Africa Total	-	-	-	-	25.33	-	-	-100.0	-
South Africa, Rep of.....	-	-	-	-	25.33	-	-	-100.0	-
Total ¹	32.19	33.50	^R 32.67	^R 33.60	^R 30.56	32.12	-3.9	1.3	*
U.S. Total ²	32.18	34.32	^R 33.78	^R 34.05	^R 30.71	34.14	-6.2	1.2	-6

¹ The average prices presented in this table, with the exception of U.S. Total, are considered to be representative prices for coal imports and fall within the range of \$20 to \$55 per short ton, inclusively.

² U.S. Total is the average price of all coal imports.

* Data round to zero.

^R Revised Data.

Notes: Average price is based on the customs import value. Coal imports include coal to Puerto Rico and the Virgin Islands.

Source: U.S. Department of Commerce, Bureau of the Census, "Monthly Report IM 145."

Table 99. Average Price of U.S. Coal Exports by Destination, 1989, 1994-1998
(Nominal Dollars per Short Ton)

Continent and Country of Destination	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
North America Total	\$28.48	\$30.57	\$33.09	\$34.05	\$32.42	\$42.29	-6.8	-3.2	-4.3
Canada ¹	27.65	29.16	32.23	33.49	32.08	42.35	-5.2	-3.6	-4.6
Mexico	38.61	41.31	39.70	39.96	44.28	41.79	-6.5	-3.4	-9
Other ²	37.38	38.08	38.03	34.29	35.58	33.13	-1.8	1.2	1.3
South America Total	42.82	43.94	43.81	43.46	42.28	43.50	-2.6	.3	-2
Argentina	44.67	47.69	46.36	43.40	42.48	44.54	-6.3	1.3	*
Brazil.....	42.85	44.12	44.67	43.88	42.26	45.65	-2.9	.3	-7
Chile.....	28.67	32.24	32.37	31.70	34.47	29.79	-11.1	-4.5	-4
Venezuela.....	40.86	40.84	40.87	36.85	40.89	39.28	*	*	.4
Other ²	43.30	40.73	36.83	47.24	40.81	39.99	6.3	1.5	.9
Europe Total	43.28	43.02	42.10	40.92	41.86	42.51	.6	.8	.2
Belgium & Luxembourg	46.38	45.71	45.73	43.47	42.23	43.46	1.5	2.4	.7
Bulgaria.....	44.57	46.42	44.26	44.04	42.09	49.44	-4.0	1.4	-1.1
Denmark.....	34.02	31.72	29.30	29.37	29.23	32.96	7.2	3.9	.3
Finland.....	40.50	41.63	42.11	39.47	41.14	42.45	-2.7	-4	-5
France.....	46.07	45.96	44.94	43.71	44.23	41.22	.2	1.0	1.2
Germany, FR	35.49	44.59	41.08	34.99	45.33	42.86	-20.4	-5.9	-2.1
Iceland.....	55.88	59.33	57.49	56.04	38.00	47.84	-5.8	10.1	1.7
Ireland.....	36.38	37.99	37.35	36.07	33.82	38.11	-4.2	1.8	-5
Italy.....	46.53	45.54	45.05	44.14	43.00	43.60	2.2	2.0	.7
Netherlands.....	45.26	44.97	41.36	41.97	41.93	40.81	.6	1.9	1.1
Norway.....	55.80	58.38	57.05	56.42	54.57	52.37	-4.4	.5	.7
Portugal.....	38.03	36.76	36.53	36.46	36.25	40.23	3.4	1.2	-6
Romania.....	42.31	44.58	46.95	42.43	38.10	45.40	-5.1	2.6	-8
Spain.....	42.89	37.01	37.56	34.75	40.12	46.49	15.9	1.7	-9
Sweden.....	47.16	48.19	47.50	48.21	45.56	44.84	-2.1	.9	.6
Turkey.....	44.92	46.07	44.33	42.61	41.28	43.35	-2.5	2.1	.4
United Kingdom.....	39.01	39.30	38.90	40.92	45.06	45.61	-7	-3.5	-1.7
Other ²	34.93	34.59	33.96	38.06	40.92	43.58	1.0	-3.9	-2.4
Asia Total	39.37	39.73	39.57	39.10	38.63	42.21	-9	.5	-8
China (Mainland).....	30.29	33.94	-	34.42	-	-	-10.7	-	-
China (Taiwan).....	36.29	36.75	36.86	36.95	38.65	37.79	-1.2	-1.5	-4
Israel.....	33.50	36.81	36.40	35.79	33.23	39.17	-9.0	.2	-1.7
Japan.....	38.59	39.00	39.41	39.14	38.52	43.00	-1.0	*	-1.2
Korea, Republic of.....	44.79	43.98	42.72	40.97	40.24	44.78	1.8	2.7	*
Other ²	45.88	40.42	48.89	29.70	37.24	52.83	13.5	5.3	-1.5
Oceania & Australia Total	48.03	40.79	40.71	39.87	39.99	34.98	17.7	4.7	3.6
Other ²	48.03	40.79	40.71	39.87	39.99	34.98	17.7	4.7	3.6
Africa Total	45.52	48.50	44.36	43.07	43.59	40.14	-6.1	1.1	1.4
Algeria.....	43.77	46.64	50.23	47.80	43.24	46.02	-6.1	.3	-5
Egypt.....	43.59	51.29	53.37	49.36	43.14	45.59	-15.0	.3	-5
Morocco.....	31.57	30.67	33.93	33.00	35.03	30.97	2.9	-2.6	.2
South Africa, Rep of.....	48.13	48.66	49.55	47.38	45.67	-	-1.1	1.3	-
Other ²	38.85	39.27	-	-	-	39.92	-1.1	-	-3
Total ³	38.55	40.24	40.53	40.03	39.90	42.43	-4.2	-8	-1.1
U.S. Total ⁴	38.89	40.55	40.76	40.27	39.93	42.52	-4.1	-6	-1.0

¹ Based on the U.S. - Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

² Includes countries with exports less than or equal to 50,000 short tons in 1997.

³ The average prices presented in this table, with the exception of U.S. Total, are considered to be representative prices for coal exports and fall within the range of \$20 to \$60 per short ton, inclusively.

⁴ U.S. Total is the average price of all coal exports.

* Data round to zero.

Note: Average price is based on the free alongside ship (f.a.s.) value.

Source: U.S. Department of Commerce, Bureau of the Census, "Monthly Report EM 545."

Table 100. Average Real Price of U.S. Coal Exports by Destination, 1989, 1994-1998
(Real 1992 Dollars per Short Ton)

Continent and Country of Destination	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
North America Total	\$25.27	\$27.40	\$30.22	\$31.67	\$30.84	\$47.14	-7.8	-4.8	-6.7
Canada ¹	24.54	26.13	29.43	31.15	30.52	47.21	-6.1	-5.3	-7.0
Mexico	34.26	37.01	36.26	37.17	42.13	46.58	-7.4	-5.0	-3.3
Other ²	33.17	34.12	34.73	31.90	33.86	36.94	-2.8	-5	-1.2
South America Total	37.99	39.38	40.00	40.43	40.23	48.50	-3.5	-1.4	-2.7
Argentina	39.64	42.74	42.34	40.38	40.42	49.65	-7.3	-5	-2.5
Brazil.....	38.02	39.54	40.80	40.82	40.21	50.89	-3.8	-1.4	-3.2
Chile.....	25.44	28.89	29.56	29.49	32.80	33.21	-11.9	-6.1	-2.9
Venezuela.....	36.25	36.59	37.32	34.27	38.90	43.79	-9	-1.7	-2.1
Other ²	38.42	36.50	33.64	43.95	38.83	44.58	5.3	-3	-1.6
Europe Total	38.40	38.55	38.45	38.06	39.83	47.39	-4	-9	-2.3
Belgium & Luxembourg	41.15	40.96	41.76	40.44	40.18	48.45	.5	.6	-1.8
Bulgaria.....	39.55	41.59	40.42	40.96	40.05	55.12	-4.9	-3	-3.6
Denmark.....	30.19	28.43	26.76	27.32	27.81	36.74	6.2	2.1	-2.1
Finland	35.93	37.31	38.46	36.72	39.14	47.32	-3.7	-2.1	-3.0
France.....	40.88	41.18	41.04	40.66	42.09	45.96	-7	-7	-1.3
Germany, FR	31.49	39.96	37.51	32.55	43.13	47.78	-21.2	-7.6	-4.5
Iceland.....	49.58	53.16	52.51	52.13	36.16	53.33	-6.7	8.2	-8
Ireland.....	32.28	34.04	34.11	33.55	32.18	42.49	-5.2	.1	-3.0
Italy.....	41.29	40.80	41.14	41.06	40.91	48.61	1.2	.2	-1.8
Netherlands.....	40.16	40.29	37.77	39.04	39.89	45.50	-3	.2	-1.4
Norway.....	49.52	52.31	52.10	52.48	51.92	58.39	-5.3	-1.2	-1.8
Portugal.....	33.75	32.94	33.36	33.91	34.49	44.85	2.4	-5	-3.1
Romania.....	37.54	39.95	42.88	39.47	36.25	50.61	-6.0	.9	-3.3
Spain.....	38.06	33.16	34.30	32.32	38.18	51.83	14.8	-1	-3.4
Sweden.....	41.84	43.18	43.38	44.84	43.35	49.99	-3.1	-9	-1.9
Turkey.....	39.86	41.28	40.48	39.64	39.28	48.32	-3.4	.4	-2.1
United Kingdom.....	34.61	35.22	35.52	38.07	42.87	50.85	-1.7	-5.2	-4.2
Other ²	30.99	31.00	31.01	35.41	38.94	48.58	*	-5.5	-4.9
Asia Total	34.93	35.60	36.14	36.37	36.76	47.06	-1.9	-1.3	-3.3
China (Mainland).....	26.88	30.41	-	32.01	-	-	-11.6	-	-
China (Taiwan).....	32.20	32.93	33.66	34.37	36.77	42.13	-2.2	-3.3	-2.9
Israel.....	29.73	32.99	33.24	33.29	31.62	43.67	-9.9	-1.5	-4.2
Japan.....	34.24	34.95	35.99	36.41	36.66	47.93	-2.0	-1.7	-3.7
Korea, Republic of.....	39.75	39.41	39.02	38.11	38.29	49.93	.8	.9	-2.5
Other ²	40.71	36.21	44.65	27.62	35.43	58.90	12.4	3.5	-4.0
Oceania & Australia Total	42.62	36.55	37.18	37.09	38.05	38.99	16.6	2.9	1.0
Other ²	42.62	36.55	37.18	37.09	38.05	38.99	16.6	2.9	1.0
Africa Total	40.39	43.46	40.51	40.06	41.48	44.74	-7.1	-7	-1.1
Algeria.....	38.84	41.79	45.88	44.46	41.14	51.31	-7.1	-1.4	-3.0
Egypt.....	38.68	45.96	48.74	45.92	41.04	50.82	-15.8	-1.5	-3.0
Morocco.....	28.01	27.48	30.99	30.69	33.33	34.53	1.9	-4.3	-2.3
South Africa, Rep of.....	42.70	43.61	45.25	44.08	43.45	-	-2.1	-4	-
Other ²	34.47	35.19	-	-	-	44.50	-2.0	-	-2.8
Total³	34.20	36.06	37.01	37.24	37.96	47.30	-5.1	-2.6	-3.5
U.S. Total⁴	34.51	36.34	37.22	37.46	37.99	47.40	-5.0	-2.4	-3.5

¹ Based on the U.S. - Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

² Includes countries with exports less than or equal to 50,000 short tons in 1997.

³ The average prices presented in this table, with the exception of U.S. Total, are considered to be representative prices for coal exports and fall within the range of \$20 to \$60 (nominal) per short ton, inclusively.

⁴ U.S. Total is the average price of all coal exports.

* Data round to zero.

Notes: Real prices are in 1992 dollars, calculated using implicit Gross Domestic Product price deflators. See Appendix D, Table D2. Average prices are based on the free alongside ship (f.a.s.) value.

Source: U.S. Department of Commerce, Bureau of the Census, "Monthly Report EM 545."

Table 101. Average Price of U.S. Metallurgical Coal Exports by Destination, 1989, 1994-1998
(Nominal Dollars per Short Ton)

Continent and Country of Destination	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
North America Total	\$34.44	\$35.39	\$36.79	\$37.25	\$35.08	\$46.09	-2.7	-0.5	-3.2
Canada ¹	34.38	34.10	35.99	36.55	34.58	46.12	.8	-1	-3.2
Mexico	50.28	49.86	47.36	46.90	44.54	-	.8	3.1	-
Other ²	-	-	-	-	-	36.38	-	-	-100.0
South America Total	42.96	44.32	44.61	43.66	42.29	45.54	-3.0	.4	-6
Argentina	44.93	48.88	46.87	43.54	42.56	44.54	-8.1	1.4	.1
Brazil.....	42.86	44.15	44.73	43.89	42.26	45.65	-2.9	.3	-7
Chile.....	-	-	30.26	30.26	-	48.84	-	-	-100.0
Venezuela.....	-	-	50.76	-	-	-	-	-	-
Other ²	44.46	-	-	-	-	-	-	-	-
Europe Total	46.84	47.60	47.68	46.02	44.56	45.26	-1.6	1.3	.4
Belgium & Luxembourg	47.34	48.34	48.68	45.97	45.07	45.07	-2.0	1.2	.5
Bulgaria.....	44.57	46.42	43.36	44.04	42.13	49.90	-4.0	1.4	-1.2
Denmark.....	-	-	-	-	-	34.97	-	-	-100.0
Finland	40.50	43.37	44.21	42.65	42.34	42.41	-6.6	-1.1	-5
France.....	46.35	47.20	47.13	45.08	44.36	43.46	-1.8	1.1	.7
Germany, FR	46.41	47.84	49.87	47.52	45.88	46.02	-3.0	.3	.1
Iceland.....	55.88	59.33	57.43	56.04	38.00	52.62	-5.8	10.1	.7
Ireland.....	-	37.42	-	-	-	36.20	-100.0	-	-100.0
Italy	48.02	48.85	47.90	46.61	45.32	46.20	-1.7	1.4	.4
Netherlands.....	46.88	47.10	47.29	46.56	44.96	44.83	-5	1.0	.5
Norway.....	55.70	58.38	57.05	56.42	54.57	55.92	-4.6	.5	*
Portugal.....	45.49	44.31	45.20	46.45	-	43.30	2.7	-	.5
Romania.....	42.31	45.31	46.95	43.02	34.71	45.41	-6.6	5.1	-8
Spain.....	48.62	49.23	50.92	49.02	46.36	47.31	-1.3	1.2	.3
Sweden.....	47.16	48.19	48.20	48.20	45.56	46.84	-2.1	.9	.1
Turkey.....	44.93	46.08	44.54	43.28	41.28	43.35	-2.5	2.1	.4
United Kingdom.....	47.74	48.49	49.08	47.22	45.15	46.44	-1.5	1.4	.3
Other ²	-	-	-	-	-	44.25	-	-	-100.0
Asia Total	43.59	43.64	43.45	42.38	41.45	44.40	-1	1.3	-2
China (Taiwan).....	42.54	42.95	45.24	44.48	42.48	45.50	-9	*	-7
Israel.....	35.69	39.79	40.91	40.91	-	39.92	-10.3	-	-1.2
Japan.....	42.29	41.68	42.19	41.14	40.57	43.83	1.5	1.0	-4
Korea, Republic of.....	46.75	47.68	46.08	45.98	44.00	46.23	-1.9	1.5	.1
Other ²	57.72	57.41	59.36	-	-	54.43	.5	-	.6
Oceania & Australia Total	55.11	-	-	-	-	-	-	-	-
Other ²	55.11	-	-	-	-	-	-	-	-
Africa Total	45.92	49.69	50.87	48.52	43.95	45.56	-7.6	1.1	.1
Algeria	43.77	46.64	50.23	47.80	43.24	46.02	-6.1	.3	-5
Egypt.....	43.60	51.31	53.38	49.38	43.14	45.59	-15.0	.3	-5
Morocco.....	-	-	30.30	-	-	33.11	-	-	-100.0
South Africa, Rep of.....	48.13	48.66	49.55	47.38	45.67	-	-1.1	1.3	-
Total³	44.48	45.36	45.40	44.24	42.75	45.17	-1.9	1.0	-2
U.S. Total⁴	44.58	45.45	45.49	44.30	42.77	45.19	-1.9	1.0	-1

¹ Based on the U.S. - Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

² Includes countries with exports less than or equal to 50,000 short tons in 1997.

³ The average prices presented in this table, with the exception of U.S. Total, are considered to be representative prices for coal exports and fall within the range of \$20 to \$60 per short ton, inclusively.

⁴ U.S. Total is the average price of all coal exports.

* Data round to zero.

Note: Average price is based on the free alongside ship (f.a.s.) value.

Source: U.S. Department of Commerce, Bureau of the Census, "Monthly Report EM 545."

Table 102. Average Real Price of U.S. Metallurgical Coal Exports by Destination, 1989, 1994-1998
(Real 1992 Dollars per Short Ton)

Continent and Country of Destination	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
North America Total	\$30.56	\$31.71	\$33.59	\$34.65	\$33.38	\$51.38	-3.6	-2.2	-5.6
Canada ¹	30.51	30.55	32.87	34.00	32.90	51.41	-1	-1.9	-5.6
Mexico.....	44.61	44.67	43.25	43.63	42.38	-	-1	1.3	-
Other ²	-	-	-	-	-	40.56	-	-	-100.0
South America Total	38.12	39.71	40.74	40.62	40.23	50.77	-4.0	-1.3	-3.1
Argentina.....	39.87	43.80	42.80	40.50	40.49	49.65	-9.0	-4	-2.4
Brazil.....	38.03	39.56	40.85	40.83	40.21	50.89	-3.9	-1.4	-3.2
Chile.....	-	-	27.64	28.15	-	54.45	-	-	-100.0
Venezuela.....	-	-	46.36	-	-	-	-	-	-
Other ²	39.45	-	-	-	-	-	-	-	-
Europe Total	41.56	42.66	43.54	42.81	42.40	50.46	-2.6	-5	-2.1
Belgium & Luxembourg.....	42.01	43.31	44.46	42.76	42.89	50.24	-3.0	-5	-2.0
Bulgaria.....	39.55	41.59	39.60	40.96	40.08	55.62	-4.9	-3	-3.7
Denmark.....	-	-	-	-	-	38.99	-	-	-100.0
Finland.....	35.93	38.86	40.37	39.67	40.29	47.28	-7.5	-2.8	-3.0
France.....	41.13	42.30	43.04	41.94	42.21	48.45	-2.8	-6	-1.8
Germany, FR.....	41.18	42.87	45.55	44.20	43.66	51.30	-3.9	-1.4	-2.4
Iceland.....	49.58	53.16	52.45	52.13	36.16	58.66	-6.7	8.2	-1.8
Ireland.....	-	33.53	-	-	-	40.36	-100.0	-	-100.0
Italy.....	42.61	43.78	43.74	43.36	43.13	51.51	-2.7	-3	-2.1
Netherlands.....	41.60	42.21	43.19	43.31	42.78	49.98	-1.4	-7	-2.0
Norway.....	49.42	52.31	52.10	52.48	51.92	62.34	-5.5	-1.2	-2.5
Portugal.....	40.36	39.70	41.28	43.21	-	48.28	1.6	-	-2.0
Romania.....	37.54	40.60	42.88	40.02	33.02	50.62	-7.5	3.3	-3.3
Spain.....	43.14	44.11	46.50	45.60	44.11	52.74	-2.2	-5	-2.2
Sweden.....	41.84	43.18	44.01	44.84	43.35	52.22	-3.1	-9	-2.4
Turkey.....	39.87	41.29	40.67	40.26	39.28	48.32	-3.4	.4	-2.1
United Kingdom.....	42.36	43.45	44.83	43.92	42.96	51.77	-2.5	-3	-2.2
Other ²	-	-	-	-	-	49.33	-	-	-100.0
Asia Total	38.68	39.10	39.68	39.42	39.44	49.50	-1.1	-5	-2.7
China (Taiwan).....	37.75	38.49	41.31	41.37	40.42	50.73	-1.9	-1.7	-3.2
Israel.....	31.66	35.65	37.36	38.06	-	44.50	-11.2	-	-3.7
Japan.....	37.53	37.35	38.53	38.27	38.60	48.86	.5	-7	-2.9
Korea, Republic of.....	41.48	42.73	42.08	42.77	41.86	51.54	-2.9	-2	-2.4
Other ²	51.22	51.44	54.21	-	-	60.68	-4	-	-1.9
Oceania & Australia Total	48.90	-	-	-	-	-	-	-	-
Other ²	48.90	-	-	-	-	-	-	-	-
Africa Total	40.74	44.53	46.45	45.14	41.81	50.80	-8.5	-6	-2.4
Algeria.....	38.84	41.79	45.88	44.46	41.14	51.31	-7.1	-1.4	-3.0
Egypt.....	38.68	45.97	48.75	45.93	41.05	50.82	-15.8	-1.5	-3.0
Morocco.....	-	-	27.67	-	-	36.91	-	-	-100.0
South Africa, Rep of.....	42.70	43.61	45.25	44.08	43.45	-	-2.1	-4	-
Total ³	39.47	40.64	41.46	41.16	40.68	50.36	-2.9	-8	-2.7
U.S. Total ⁴	39.56	40.72	41.54	41.21	40.69	50.38	-2.9	-7	-2.6

¹ Based on the U.S. - Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

² Includes countries with exports less than or equal to 50,000 short tons in 1997.

³ The average prices presented in this table, with the exception of U.S. Total, are considered to be representative prices for coal exports and fall within the range of \$20 to \$60 (nominal) per short ton, inclusively.

⁴ U.S. Total is the average price of all coal exports.

Notes: Real prices are in 1992 dollars, calculated using implicit Gross Domestic Product price deflators. See Appendix D, Table D2. Average prices are based on the free alongside ship (f.a.s.) value.

Source: U.S. Department of Commerce, Bureau of the Census, "Monthly Report EM 545."

Table 103. Average Price of U.S. Steam Coal Exports by Destination, 1989, 1994-1998
(Nominal Dollars per Short Ton)

Continent and Country of Destination	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
North America Total	\$26.76	\$28.26	\$29.41	\$31.06	\$30.09	\$39.51	-5.3	-2.9	-4.2
Canada ¹	25.51	26.64	28.06	30.46	29.97	39.56	-4.3	-3.9	-4.8
Mexico	38.48	38.67	36.21	35.60	41.42	41.79	-5	-1.8	-9
Other ²	37.38	38.08	38.03	34.29	35.58	32.39	-1.8	1.2	1.6
South America Total	37.82	38.78	34.94	35.66	36.52	29.23	-2.5	.9	2.9
Argentina	40.80	40.79	40.53	36.09	33.11	40.75	*	5.4	*
Brazil.....	40.81	42.12	40.57	34.81	-	-	-3.1	-	-
Chile.....	28.67	32.24	32.76	32.96	34.47	29.20	-11.1	-4.5	-2
Venezuela.....	40.86	40.84	40.83	36.85	40.89	39.28	*	*	.4
Other ²	40.74	40.73	36.83	47.24	40.81	39.99	*	*	.2
Europe Total	31.22	32.52	33.71	34.33	35.01	36.77	-4.0	-2.8	-1.8
Belgium & Luxembourg	35.91	36.34	36.69	35.07	33.49	33.62	-1.2	1.8	.7
Bulgaria.....	-	-	50.55	-	41.40	48.99	-	-100.0	-100.0
Denmark.....	34.02	31.72	29.30	29.37	29.23	32.87	7.2	3.9	.4
Finland	-	36.20	35.23	35.53	35.47	45.02	-100.0	-100.0	-100.0
France.....	36.14	34.84	36.14	35.13	38.11	34.76	3.7	-1.3	.4
Germany, FR	30.70	35.04	31.92	33.31	40.67	35.68	-12.4	-6.8	-1.6
Iceland.....	-	-	57.93	-	-	45.94	-	-	-100.0
Ireland.....	36.38	38.13	37.35	36.07	33.82	38.41	-4.6	1.8	-6
Italy	37.66	39.30	41.20	41.70	38.30	39.82	-4.2	-4	-6
Netherlands.....	27.91	32.52	32.94	36.45	35.95	36.52	-14.2	-6.1	-2.9
Norway.....	56.66	-	-	-	-	47.24	-	-	2.0
Portugal.....	33.60	35.48	35.60	36.28	36.25	39.22	-5.3	-1.9	-1.7
Romania.....	-	29.17	-	39.08	40.63	38.78	-100.0	-100.0	-100.0
Spain.....	22.43	22.38	22.14	21.37	21.19	32.77	.2	1.4	-4.1
Sweden.....	-	-	39.21	48.54	-	39.64	-	-	-100.0
Turkey.....	40.78	42.02	41.28	30.98	-	39.90	-2.9	-	.2
United Kingdom.....	28.64	29.99	28.82	30.63	42.71	34.87	-4.5	-9.5	-2.2
Other ²	34.93	34.59	33.96	38.06	40.92	39.23	1.0	-3.9	-1.3
Asia Total	34.18	34.94	35.84	34.63	35.18	37.41	-2.2	-7	-1.0
China (Mainland).....	30.29	33.94	-	34.42	-	-	-10.7	-	-
China (Taiwan).....	34.46	34.71	35.33	35.66	38.28	36.12	-7	-2.6	-5
Israel.....	33.15	35.92	35.12	34.63	33.23	38.84	-7.7	*	-1.7
Japan	33.88	34.97	36.31	35.03	33.57	39.03	-3.1	.2	-1.5
Korea, Republic of.....	35.43	35.01	35.32	32.01	32.56	37.98	1.2	2.1	-8
Other ²	43.65	32.61	38.26	29.70	37.24	37.49	33.8	4.0	1.7
Oceania & Australia Total	37.25	40.79	40.71	39.87	39.99	34.98	-8.7	-1.8	.7
Other ²	37.25	40.79	40.71	39.87	39.99	34.98	-8.7	-1.8	.7
Africa Total	32.38	32.31	34.02	33.01	35.12	30.90	.2	-2.0	.5
Egypt.....	39.88	40.73	40.78	40.81	40.89	-	-2.1	-6	-
Morocco.....	31.57	30.67	34.01	33.00	35.03	30.90	2.9	-2.6	.2
South Africa, Rep of.....	-	-	-	39.80	-	-	-	-	-
Other ²	38.85	39.27	-	-	-	39.92	-1.1	-	-3
Total ³	29.34	31.61	33.51	33.89	34.03	37.31	-7.2	-3.6	-2.6
U.S. Total ⁴	30.24	32.42	34.09	34.51	34.34	37.64	-6.7	-3.1	-2.4

¹ Based on the U.S. - Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

² Includes countries with exports less than or equal to 50,000 short tons in 1997.

³ The average prices presented in this table, with the exception of U.S. Total, are considered to be representative prices for coal exports and fall within the range of \$20 to \$60 per short ton, inclusively.

⁴ U.S. Total is the average price of all coal exports.

* Data round to zero.

Notes: Average price is based on the free alongside ship (f.a.s.) value. Steam coal includes bituminous, subbituminous, lignite, and anthracite.

Source: U.S. Department of Commerce, Bureau of the Census, "Monthly Report EM 545."

Table 104. Average Real Price of U.S. Steam Coal Exports by Destination, 1989, 1994-1998
(Real 1992 Dollars per Short Ton)

Continent and Country of Destination	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
North America Total	\$23.75	\$25.32	\$26.86	\$28.90	\$28.63	\$44.05	-6.2	-4.6	-6.6
Canada ¹	22.63	23.87	25.62	28.34	28.51	44.10	-5.2	-5.6	-7.1
Mexico	34.15	34.65	33.06	33.12	39.41	46.58	-1.5	-3.5	-3.4
Other ²	33.17	34.12	34.73	31.90	33.86	36.11	-2.8	-5	-9
South America Total	33.55	34.75	31.91	33.17	34.75	32.58	-3.4	-9	.3
Argentina	36.20	36.55	37.01	33.57	31.50	45.43	-9	3.5	-2.5
Brazil.....	36.21	37.74	37.05	32.39	-	-	-4.0	-	-
Chile.....	25.44	28.89	29.92	30.66	32.80	32.55	-11.9	-6.1	-2.7
Venezuela.....	36.25	36.59	37.28	34.27	38.90	43.79	-9	-1.7	-2.1
Other ²	36.15	36.50	33.64	43.95	38.83	44.58	-1.0	-1.8	-2.3
Europe Total	27.70	29.14	30.79	31.93	33.31	41.00	-4.9	-4.5	-4.3
Belgium & Luxembourg	31.87	32.56	33.51	32.62	31.86	37.48	-2.1	*	-1.8
Bulgaria.....	-	-	46.17	-	39.39	54.61	-	-100.0	-100.0
Denmark.....	30.19	28.43	26.76	27.32	27.81	36.65	6.2	2.1	-2.1
Finland.....	-	32.43	32.17	33.05	33.75	50.19	-100.0	-100.0	-100.0
France.....	32.07	31.22	33.00	32.68	36.26	38.75	2.7	-3.0	-2.1
Germany, FR	27.24	31.39	29.15	30.99	38.70	39.78	-13.2	-8.4	-4.1
Iceland.....	-	-	52.90	-	-	51.22	-	-	-100.0
Ireland.....	32.28	34.16	34.11	33.55	32.18	42.82	-5.5	.1	-3.1
Italy.....	33.42	35.21	37.62	38.79	36.44	44.39	-5.1	-2.1	-3.1
Netherlands.....	24.77	29.14	30.08	33.91	34.21	40.71	-15.0	-7.8	-5.4
Norway.....	50.27	-	-	-	-	52.66	-	-	-5
Portugal.....	29.82	31.79	32.51	33.75	34.49	43.72	-6.2	-3.6	-4.2
Romania.....	-	26.13	-	36.35	38.66	43.23	-100.0	-100.0	-100.0
Spain.....	19.90	20.06	20.22	19.88	20.16	36.53	-8	-3	-6.5
Sweden.....	-	-	35.81	45.15	-	44.19	-	-	-100.0
Turkey.....	36.18	37.65	37.70	28.82	-	44.48	-3.9	-	-2.3
United Kingdom.....	25.41	26.88	26.32	28.49	40.63	38.87	-5.4	-11.1	-4.6
Other ²	30.99	31.00	31.01	35.41	38.94	43.73	*	-5.5	-3.8
Asia Total	30.33	31.30	32.73	32.21	33.48	41.70	-3.1	-2.4	-3.5
China (Mainland).....	26.88	30.41	-	32.01	-	-	-11.6	-	-
China (Taiwan).....	30.58	31.10	32.27	33.17	36.42	40.27	-1.7	-4.3	-3.0
Israel.....	29.42	32.19	32.07	32.21	31.62	43.30	-8.6	-1.8	-4.2
Japan.....	30.07	31.33	33.16	32.58	31.94	43.51	-4.0	-1.5	-4.0
Korea, Republic of.....	31.44	31.37	32.25	29.78	30.98	42.34	.2	.4	-3.3
Other ²	38.73	29.22	34.94	27.62	35.43	41.79	32.5	2.3	-8
Oceania & Australia Total	33.06	36.55	37.18	37.09	38.05	38.99	-9.5	-3.4	-1.8
Other ²	33.06	36.55	37.18	37.09	38.05	38.99	-9.5	-3.4	-1.8
Africa Total	28.73	28.95	31.07	30.70	33.41	34.45	-8	-3.7	-2.0
Egypt.....	35.39	36.49	37.24	37.96	38.91	-	-3.0	-2.3	-
Morocco.....	28.01	27.48	31.06	30.69	33.33	34.45	1.9	-4.3	-2.3
South Africa, Rep of.....	-	-	-	37.03	-	-	-	-	-
Other ²	34.47	35.19	-	-	-	44.50	-2.0	-	-2.8
Total ³	26.03	28.33	30.61	31.52	32.38	41.59	-8.1	-5.3	-5.1
U.S. Total ⁴	26.83	29.05	31.13	32.11	32.68	41.97	-7.6	-4.8	-4.8

¹ Based on the U.S. - Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

² Includes countries with exports less than or equal to 50,000 short tons in 1997.

³ The average prices presented in this table, with the exception of U.S. Total, are considered to be representative prices for coal exports and fall within the range of \$20 to \$60 (nominal) per short ton, inclusively.

⁴ U.S. Total is the average price of all coal exports.

* Data round to zero.

Notes: Real prices are in 1992 dollars, calculated using implicit Gross Domestic Product price deflators. See Appendix D, Table D2. Average prices are based on the free alongside ship (f.a.s.) value. Steam coal includes bituminous, subbituminous, lignite, and anthracite.

Source: U.S. Department of Commerce, Bureau of the Census, "Monthly Report EM 545."

Coal Quality

Table 105. Estimate of Recoverable Reserves of Coal by Sulfur Range, State, and Mine Type
(Million Short Tons Remaining as of January 1, 1997)

State and Type of Mining	Sulfur Content (pounds of sulfur per million Btu)						Total
	< = 0.40	0.41 - 0.60	0.61 - 0.83	0.84 - 1.67	1.68 - 2.50	> 2.50	
Alabama	-	403	367	2,010	190	-	2,970
Surface	-	253	267	1,664	136	-	2,320
Underground	-	150	100	347	54	-	650
Alaska, Southern	251	94	-	-	-	-	2,544
Surface	383	41	-	-	-	-	424
Underground	2,067	53	-	-	-	-	2,120
Alaska, Northern	-	-	-	-	-	-	-
Surface	-	-	-	-	-	-	-
Underground	-	-	-	-	-	-	-
Arizona	-	98	-	-	-	-	98
Surface	-	47	-	-	-	-	47
Underground	-	51	-	-	-	-	51
Arkansas ¹	-	8	163	44	6	7	228
Surface	-	2	73	24	1	1	101
Underground	-	7	90	20	5	6	127
Colorado ¹	3,646	2,298	3,681	324	95	-	10,045
Surface	264	116	3,325	41	14	-	3,759
Underground	3,382	2,183	357	283	81	-	6,286
Georgia	1	1	*	*	*	*	2
Surface	*	*	*	*	*	*	1
Underground	*	*	*	*	*	*	1
Idaho	*	1	1	1	-	-	2
Surface	-	-	-	-	-	-	-
Underground	*	1	1	1	-	-	2
Illinois	46	188	407	1,540	1,588	34,437	38,206
Surface	-	-	3	203	339	9,561	10,106
Underground	46	188	404	1,337	1,249	24,876	28,099
Indiana	-	308	183	667	1,116	2,014	4,287
Surface	-	60	26	101	141	290	618
Underground	-	248	157	566	975	1,724	3,669
Iowa	-	-	-	-	407	720	1,127
Surface	-	-	-	-	320	-	320
Underground	-	-	-	-	87	720	807
Kansas	-	-	-	-	226	457	683
Surface	-	-	-	-	226	457	683
Underground	-	-	-	-	-	-	-
Kentucky, Eastern	169	2,011	1,388	1,713	833	636	6,750
Surface	138	1,637	1,130	1,394	678	518	5,495
Underground	32	374	258	318	155	118	1,255
Kentucky, Western	-	-	-	155	2,706	6,366	9,227
Surface	-	-	-	124	919	1,267	2,310
Underground	-	-	-	31	1,787	5,099	6,917
Louisiana	-	-	-	343	-	-	343
Surface	-	-	-	343	-	-	343
Underground	-	-	-	-	-	-	-
Maryland	-	31	56	116	201	-	403
Surface	-	3	8	13	31	-	54
Underground	-	28	49	103	169	-	349
Michigan	-	-	8	23	16	11	59
Surface	-	-	1	2	1	*	3
Underground	-	-	8	21	16	11	55
Missouri	-	-	-	-	170	3,680	3,850
Surface	-	-	-	-	150	3,011	3,161
Underground	-	-	-	-	20	670	689
Montana	33,529	16,816	16,761	4,811	2,022	1,371	75,310
Surface	17,966	6,983	9,484	2,440	1,609	905	39,387
Underground	15,563	9,833	7,277	2,371	413	466	35,923
New Mexico ¹	60	2,429	1,601	3,048	-	-	7,138
Surface	36	1,045	1,096	2,099	-	-	4,276
Underground	25	1,384	505	949	-	-	2,863
North Carolina	-	-	*	2	2	1	5
Surface	-	-	-	-	-	-	-
Underground	-	-	*	2	2	1	5
North Dakota	432	744	1,364	3,410	850	366	7,167
Surface	432	744	1,364	3,410	850	366	7,167
Underground	-	-	-	-	-	-	-
Ohio	81	168	334	1,045	2,626	7,418	11,672
Surface	20	96	167	413	858	2,291	3,846
Underground	61	73	167	632	1,767	5,127	7,826

See footnotes at end of table.

Table 105. Estimate of Recoverable Reserves of Coal by Sulfur Range, State, and Mine Type (Continued)
(Million Short Tons Remaining as of January 1, 1997)

State and Type of Mining	Sulfur Content (pounds of sulfur per million Btu)						Total
	< = 0.40	0.41 - 0.60	0.61 - 0.83	0.84 - 1.67	1.68 - 2.50	> 2.50	
Oklahoma	—	219	123	178	113	180	813
Surface	—	65	25	33	33	80	237
Underground	—	154	98	144	80	100	576
Oregon	4	1	3	—	1	1	9
Surface	1	*	1	—	*	*	2
Underground	3	1	2	—	1	1	7
Pennsylvania, Anthracite	180	467	96	17	2	*	762
Surface	85	262	61	11	1	*	422
Underground	95	205	35	6	1	—	341
Pennsylvania, Bituminous	—	280	798	4,949	4,109	1,500	11,635
Surface	—	22	62	295	219	130	728
Underground	—	258	736	4,654	3,890	1,370	10,907
South Dakota	—	—	104	1	172	—	277
Surface	—	—	104	1	172	—	277
Underground	—	—	—	—	—	—	—
Tennessee	—	105	61	221	97	—	484
Surface	—	38	23	92	40	—	193
Underground	—	67	38	129	58	—	291
Texas	—	—	584	5,623	3,375	373	9,954
Surface	—	—	584	5,623	3,375	372	9,954
Underground	—	—	—	—	—	—	—
Utah	372	666	544	850	221	296	2,949
Surface	8	32	19	85	35	34	212
Underground	363	634	525	765	186	262	2,737
Virginia ¹	184	598	382	126	—	—	1,290
Surface	42	190	156	44	—	—	432
Underground	143	408	227	82	—	—	858
Washington	63	92	92	473	—	—	720
Surface	—	—	6	39	—	—	45
Underground	63	92	86	434	—	—	675
West Virginia	639	6,358	2,682	3,975	2,489	3,179	19,322
Surface	112	1,414	550	436	177	106	2,794
Underground	528	4,945	2,131	3,539	2,312	3,073	16,528
Wyoming	6,654	17,325	10,065	7,396	1,158	2,216	44,813
Surface	4,303	8,563	4,015	2,274	517	2,184	21,855
Underground	2,351	8,762	6,050	5,122	640	33	22,959
U.S. Total	48,512	51,708	41,847	43,060	24,788	65,229	275,143
Surface	23,790	21,612	22,549	21,203	10,842	21,575	121,570
Underground	24,722	30,096	19,298	21,857	13,946	43,654	153,573

¹ Data include minor amounts of anthracite (all occurring in heat content categories greater than 23.00 million short tons) as follows: Arkansas 52.2, Colorado 13.4, New Mexico 1.2, and Virginia 70.5, expressed in million short tons.

* Data round to zero.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, *U.S. Coal Reserves: A Review and Update* (DOE/EIA-0529(95)), August, 1996.

Table 106. Average Quality of Coal Received at Electric Utilities by Census Division and State, 1989, 1994-1998

Census Division and State and Quality ¹	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
New England									
Btu.....	12,810	12,756	12,793	12,848	12,897	13,109	*	*	*
Sulfur.....	.87	.86	.85	.84	.98	1.26	1.5	-3.0	-4.0
Ash.....	7.85	7.79	7.75	7.48	7.49	7.59	.8	1.2	.4
Connecticut									
Btu.....	13,138	13,132	13,100	13,110	13,094	13,308	*	*	*
Sulfur.....	.53	.54	.54	.56	.54	.53	-.8	-.3	-.1
Ash.....	6.80	7.20	7.14	7.05	7.38	6.13	-5.5	-2.0	1.1
Massachusetts									
Btu.....	12,617	12,571	12,633	12,698	12,814	13,009	*	*	*
Sulfur.....	.72	.72	.71	.71	.91	1.23	-.5	-5.8	-5.8
Ash.....	8.52	8.24	8.07	7.83	7.85	8.07	3.3	2.1	.6
New Hampshire									
Btu.....	13,133	13,054	13,146	13,111	13,032	13,359	1	*	*
Sulfur.....	1.40	1.42	1.56	1.38	1.52	2.00	-1.4	-1.9	-3.8
Ash.....	6.71	6.88	7.02	6.74	6.40	6.80	-2.4	1.2	-1
Middle Atlantic									
Btu.....	12,478	12,436	12,460	12,474	12,509	12,432	*	*	*
Sulfur.....	2.07	2.05	2.01	2.03	2.01	1.95	1.2	.8	.7
Ash.....	11.84	12.03	11.80	11.93	11.52	12.23	-1.6	.7	-4
New Jersey									
Btu.....	13,113	13,084	12,993	13,282	13,341	13,319	*	*	*
Sulfur.....	1.13	1.24	1.36	1.21	1.29	1.18	-9.3	-3.2	-5
Ash.....	8.70	8.54	9.02	7.51	7.44	7.36	1.9	4.0	1.9
New York									
Btu.....	13,052	13,105	13,013	13,051	12,959	12,824	*	*	*
Sulfur.....	1.75	1.80	1.80	1.79	1.71	1.69	-3.0	.6	.3
Ash.....	7.79	7.63	7.91	7.90	7.98	9.06	2.1	-6	-1.7
Pennsylvania									
Btu.....	12,323	12,279	12,321	12,315	12,368	12,273	*	*	*
Sulfur.....	2.19	2.13	2.09	2.12	2.11	2.06	2.7	.9	.7
Ash.....	12.86	13.03	12.72	12.97	12.49	13.34	-1.3	.7	-4
East North Central									
Btu.....	10,589	10,588	10,611	10,676	10,837	11,044	*	-1	*
Sulfur.....	1.33	1.35	1.36	1.28	1.55	1.83	-1.3	-3.6	-3.5
Ash.....	8.12	8.22	8.07	8.00	8.34	9.03	-1.3	-7	-1.2
Illinois									
Btu.....	9,700	9,781	9,878	9,970	10,181	10,705	-1	-1	-1
Sulfur.....	1.10	1.17	1.16	1.14	1.46	2.01	-6.4	-6.8	-6.5
Ash.....	6.91	7.04	6.98	7.01	7.44	8.65	-1.8	-1.8	-2.5
Indiana									
Btu.....	10,517	10,461	10,357	10,338	10,535	10,698	1	*	*
Sulfur.....	1.63	1.61	1.59	1.57	1.76	2.22	1.0	-2.0	-3.4
Ash.....	7.94	7.90	7.76	7.65	8.09	8.94	.5	-5	-1.3
Michigan									
Btu.....	10,563	10,566	10,504	10,677	10,925	11,278	*	-1	-1
Sulfur.....	.67	.67	.63	.63	.68	.67	-.5	-.5	*
Ash.....	6.41	6.65	6.59	6.66	6.97	6.89	-3.5	-2.0	-8
Ohio									
Btu.....	11,913	11,891	12,056	12,122	12,052	11,835	*	*	*
Sulfur.....	2.01	2.01	2.08	1.89	2.34	2.46	-.2	-3.7	-2.2
Ash.....	11.45	11.53	11.01	10.84	10.91	11.49	-7	1.2	*
Wisconsin									
Btu.....	9,299	9,375	9,222	9,351	9,565	9,705	-1	-1	*
Sulfur.....	.46	.50	.46	.46	.51	.86	-7.9	-2.3	-6.6
Ash.....	5.55	5.74	5.74	6.03	6.27	6.38	-3.2	-3.0	-1.5
West North Central									
Btu.....	8,388	8,394	8,430	8,418	8,480	8,676	*	*	*
Sulfur.....	.47	.51	.53	.54	.68	1.00	-8.4	-8.8	-8.1
Ash.....	6.15	6.31	6.38	6.41	6.82	7.52	-2.7	-2.6	-2.2
Iowa									
Btu.....	8,636	8,662	8,658	8,678	8,783	8,940	*	*	*
Sulfur.....	.44	.45	.45	.49	.57	.78	-1.5	-6.0	-6.1
Ash.....	5.57	5.53	5.61	5.60	5.59	5.93	.8	-1	-7

See footnotes at end of table.

Table 106. Average Quality of Coal Received at Electric Utilities by Census Division and State, 1989, 1994-1998 (Continued)

Census Division and State and Quality ¹	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Kansas									
Btu.....	8,696	8,766	8,827	8,730	8,708	8,876	-1	*	*
Sulfur.....	.45	.48	.49	.43	.49	.64	-5.8	-1.8	-3.8
Ash.....	5.45	5.52	5.52	5.46	5.63	6.00	-1.3	-8	-1.1
Minnesota									
Btu.....	8,883	8,895	8,914	8,828	8,821	8,767	*	*	*
Sulfur.....	.44	.45	.45	.47	.46	.51	-2.1	-1.3	-1.7
Ash.....	6.29	6.32	6.32	6.71	6.64	7.09	-5	-1.3	-1.3
Missouri									
Btu.....	8,938	8,994	9,063	9,216	9,718	10,368	-1	-2	-2
Sulfur.....	.37	.47	.58	.57	1.03	2.09	-21.2	-22.6	-17.5
Ash.....	5.18	5.32	5.62	5.69	6.65	8.92	-2.7	-6.0	-5.9
Nebraska									
Btu.....	8,584	8,595	8,599	8,594	8,571	8,664	*	*	*
Sulfur.....	.27	.32	.34	.33	.35	.36	-14.2	-5.9	-3.1
Ash.....	4.77	4.79	5.11	5.16	5.17	5.15	-4	-2.0	-8
North Dakota									
Btu.....	6,566	6,559	6,597	6,585	6,593	6,580	*	*	*
Sulfur.....	.76	.77	.72	.74	.75	.73	-6	.3	.5
Ash.....	9.10	9.38	9.32	9.29	9.39	9.16	-3.0	-8	-1
South Dakota									
Btu.....	8,728	8,687	9,034	6,972	6,049	6,137	*	10	4
Sulfur.....	.72	.63	.52	.87	.91	.89	14.9	-5.8	-2.3
Ash.....	9.12	8.88	6.66	4.96	8.81	7.74	2.7	.8	1.8
South Atlantic									
Btu.....	12,296	12,311	12,285	12,324	12,362	12,422	*	*	*
Sulfur.....	1.26	1.29	1.27	1.27	1.33	1.50	-2.5	-1.5	-1.9
Ash.....	9.92	10.05	9.75	9.71	9.72	10.08	-1.3	.5	-2
Delaware									
Btu.....	12,962	13,062	13,020	13,085	12,954	12,943	-1	*	*
Sulfur.....	.98	.99	1.01	1.00	.92	1.04	-1.7	1.5	-7
Ash.....	8.93	8.65	8.72	8.56	9.09	8.99	3.2	-4	-1
Florida									
Btu.....	12,144	12,122	12,193	12,296	12,293	12,383	*	*	*
Sulfur.....	1.55	1.59	1.55	1.47	1.60	1.75	-2.8	-9	-1.4
Ash.....	8.01	8.40	7.96	8.09	8.19	8.58	-4.6	-5	-8
Georgia									
Btu.....	11,750	11,755	11,581	11,576	11,774	12,100	*	*	*
Sulfur.....	.85	.84	.83	.81	1.05	1.68	1.3	-5.3	-7.3
Ash.....	9.40	9.42	8.84	8.87	8.99	10.13	-3	1.1	-8
Maryland									
Btu.....	12,914	12,913	12,879	12,965	12,824	12,698	*	*	*
Sulfur.....	1.17	1.14	1.11	1.06	1.16	1.43	3.2	.3	-2.2
Ash.....	9.04	9.42	9.49	9.32	9.91	10.46	-4.0	-2.3	-1.6
North Carolina									
Btu.....	12,398	12,368	12,422	12,461	12,416	12,531	*	*	*
Sulfur.....	.89	.90	.89	.86	.95	.92	-9	-1.5	-3
Ash.....	10.53	10.50	10.16	10.20	10.27	9.93	.3	.6	.6
South Carolina									
Btu.....	12,805	12,855	12,757	12,852	12,771	12,618	*	*	*
Sulfur.....	1.20	1.20	1.21	1.19	1.21	1.12	.3	-3	.8
Ash.....	8.90	8.70	8.90	8.53	8.87	9.16	2.3	.1	-3
Virginia									
Btu.....	12,603	12,554	12,597	12,743	12,778	12,693	*	*	*
Sulfur.....	.97	1.01	.99	1.03	.99	.94	-3.5	-4	.4
Ash.....	9.96	11.58	11.02	10.21	9.91	9.44	-13.9	.1	.6
West Virginia									
Btu.....	12,305	12,398	12,378	12,418	12,468	12,395	-1	*	*
Sulfur.....	1.86	1.95	1.93	1.98	1.87	1.85	-4.7	-1	*
Ash.....	12.17	11.88	11.78	11.88	11.50	11.71	2.4	1.4	.4
East South Central									
Btu.....	11,543	11,584	11,714	11,808	11,909	11,800	*	-1	*
Sulfur.....	1.71	1.83	1.86	1.87	1.88	2.18	-6.4	-2.3	-2.7
Ash.....	10.58	10.65	10.60	10.58	10.66	11.36	-6	-2	-8
Alabama									
Btu.....	11,519	11,584	11,794	11,861	12,088	12,023	-1	-1	*
Sulfur.....	1.13	1.13	1.24	1.20	1.30	1.64	.7	-3.4	-4.0
Ash.....	10.45	10.49	10.71	10.74	11.54	11.87	-4	-2.4	-1.4

See footnotes at end of table.

Table 106. Average Quality of Coal Received at Electric Utilities by Census Division and State, 1989, 1994-1998 (Continued)

Census Division and State and Quality ¹	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Kentucky									
Btu.....	11,579	11,571	11,536	11,625	11,683	11,493	*	*	*
Sulfur.....	2.37	2.50	2.47	2.42	2.34	2.74	-5.2	0.3	-1.6
Ash.....	12.66	12.46	12.15	11.91	11.35	12.47	1.6	2.8	.2
Mississippi									
Btu.....	10,569	10,486	11,023	11,221	11,312	12,654	1	-2	-2
Sulfur.....	.75	.68	.93	1.04	1.02	1.56	10.0	-7.5	-7.8
Ash.....	6.03	6.13	6.44	7.81	7.88	7.77	-1.5	-6.5	-2.8
Tennessee									
Btu.....	11,733	11,855	12,062	12,130	12,186	11,895	-1	-1	*
Sulfur.....	1.69	1.90	1.87	1.97	2.00	1.99	-11.3	-4.2	-1.8
Ash.....	8.89	9.17	8.89	8.83	8.94	9.56	-3.1	-1	-8
West South Central									
Btu.....	7,837	7,766	7,798	7,733	7,709	7,692	1	*	*
Sulfur.....	.60	.64	.60	.64	.62	.62	-5.9	-9	-4
Ash.....	9.12	9.35	9.19	9.53	9.50	10.01	-2.4	-1.0	-1.0
Arkansas									
Btu.....	8,671	8,707	8,703	8,687	8,707	8,720	*	*	*
Sulfur.....	.29	.33	.33	.33	.32	.34	-10.1	-2.0	-1.6
Ash.....	4.90	5.12	5.20	5.10	4.92	5.26	-4.4	-1	-8
Louisiana									
Btu.....	8,097	8,102	8,171	8,110	8,136	8,187	*	*	*
Sulfur.....	.56	.64	.57	.58	.51	.48	-11.2	2.6	1.9
Ash.....	7.76	7.22	7.13	7.42	7.16	7.27	7.5	2.0	.7
Oklahoma									
Btu.....	8,651	8,641	8,600	8,557	8,573	8,825	*	*	*
Sulfur.....	.30	.30	.33	.36	.35	.45	-.3	-3.8	-4.3
Ash.....	4.87	4.85	4.93	5.20	5.07	5.43	.3	-1.0	-1.2
Texas									
Btu.....	7,509	7,423	7,440	7,346	7,346	7,287	1	1	*
Sulfur.....	.71	.75	.71	.77	.73	.71	-4.5	-7	*
Ash.....	10.82	11.09	10.98	11.50	11.31	11.84	-2.4	-1.1	-1.0
Mountain									
Btu.....	9,708	9,723	9,741	9,736	9,755	9,771	*	*	*
Sulfur.....	.55	.56	.55	.54	.55	.55	-1.3	.2	.1
Ash.....	11.24	11.40	11.37	11.16	11.11	11.12	-1.4	.3	.1
Arizona									
Btu.....	10,186	10,159	10,232	10,274	10,281	10,596	*	*	*
Sulfur.....	.55	.54	.55	.53	.51	.49	.3	1.5	1.2
Ash.....	12.70	12.73	12.41	12.13	11.97	11.22	-2	1.5	1.4
Colorado									
Btu.....	9,834	9,872	9,858	9,895	9,946	9,848	*	*	*
Sulfur.....	.38	.38	.39	.39	.40	.37	1.2	-1.2	.3
Ash.....	6.73	6.92	6.94	7.16	7.12	6.93	-2.8	-1.4	-3
Montana									
Btu.....	8,433	8,426	8,439	8,520	8,500	8,509	*	*	*
Sulfur.....	.72	.72	.68	.68	.66	.66	-.2	2.3	1.0
Ash.....	9.49	9.32	9.00	9.15	9.05	9.46	1.8	1.2	*
Nevada									
Btu.....	11,199	11,169	11,140	11,075	11,291	11,117	*	*	*
Sulfur.....	.47	.50	.49	.48	.49	.52	-6.9	-1.4	-1.2
Ash.....	9.68	9.80	9.71	9.70	9.57	9.51	-1.3	.3	.2
New Mexico									
Btu.....	9,082	9,069	9,116	9,033	9,043	9,129	*	*	*
Sulfur.....	.80	.81	.80	.80	.82	.79	-1.5	-.5	.1
Ash.....	22.80	22.71	22.78	22.51	22.44	21.43	.4	.4	.7
Utah									
Btu.....	11,310	11,330	11,513	11,550	11,491	11,322	*	*	*
Sulfur.....	.46	.48	.47	.47	.47	.49	-2.6	-.3	-.5
Ash.....	11.17	10.90	10.90	10.27	10.25	11.59	2.5	2.1	-4
Wyoming									
Btu.....	8,794	8,787	8,716	8,738	8,766	8,788	*	*	*
Sulfur.....	.53	.54	.52	.50	.52	.52	-.6	.6	.2
Ash.....	7.52	7.61	8.12	8.06	8.00	7.87	-1.1	-1.5	-.5

See footnotes at end of table.

Table 106. Average Quality of Coal Received at Electric Utilities by Census Division and State, 1989, 1994-1998 (Continued)

Census Division and State and Quality ¹	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Pacific									
Btu.....	8,332	8,153	8,066	8,380	8,543	8,161	2	-1	*
Sulfur .....	.52	.58	.64	.62	.57	.66	-9.8	-2.4	-2.6
Ash.....	10.42	12.43	13.62	11.79	11.14	13.57	-16.2	-1.7	-2.9
Oregon									
Btu.....	8,685	8,757	8,782	8,882	8,937	-	-1	-1	-
Sulfur .....	.32	.33	.26	.30	.37	-	-4.9	-4.0	-
Ash.....	5.19	5.41	4.79	5.52	5.89	-	-4.1	-3.1	-
Washington									
Btu.....	8,215	8,043	7,936	8,267	8,400	8,161	2	-1	*
Sulfur .....	.59	.62	.71	.69	.65	.66	-5.5	-2.3	-1.3
Ash.....	12.14	13.71	15.24	13.20	13.04	13.57	-11.4	-1.8	-1.2
U.S. Total									
Btu.....	10,241	10,275	10,263	10,248	10,338	10,425	*	*	*
Sulfur	1.06	1.11	1.10	1.08	1.17	1.33	-4.5	-2.3	-2.4
Ash.....	9.18	9.36	9.22	9.23	9.36	9.93	-1.9	-5	-8

¹ Quality units are: Btu (per pound); sulfur (percent by weight); and ash (percent by weight).

* Data round to zero.

Source: Federal Energy Regulatory Commission, FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

Table 107. Average Quality of Coal Received at Manufacturing and Coke Plants by Census Division and State, 1994-1998

Census Division and State and Quality ¹	1998	1997	1996	1995	1994	Percent Change 1997-1998
New England						
Btu	13,264	13,326	13,028	13,410	13,383	-0.5
Sulfur .....	.79	.85	1.03	1.32	.72	-6.6
Ash	7.55	7.33	7.35	6.99	5.86	3.0
Maine						
Btu	13,174	13,218	12,935	13,392	13,162	-3
Sulfur .....	.80	.87	1.08	1.39	.71	-7.5
Ash	7.60	7.34	7.31	6.93	5.30	3.4
Massachusetts						
Btu	13,675	13,746	13,697	13,556	13,939	-5
Sulfur .....	.73	.76	.74	.75	.73	-3.7
Ash	7.35	7.29	7.65	7.55	7.26	.8
Middle Atlantic						
Btu	12,790	12,797	12,780	12,559	12,549	*
Sulfur	1.19	R 1.19	1.20	1.15	1.14	-1
Ash	7.16	R 6.99	7.12	7.11	6.95	2.5
New Jersey						
Btu	12,615	12,497	12,474	12,575	12,515	.9
Sulfur	1.72	.64	1.36	.96	.93	169.3
Ash	12.55	11.56	10.98	11.34	12.40	8.6
New York²						
Btu	13,183	13,262	13,168	13,122	13,203	-6
Sulfur	1.18	1.36	1.41	1.29	1.34	-13.2
Ash	6.73	R 6.82	6.84	7.20	6.69	-1.3
Pennsylvania²						
Btu	12,633	12,640	12,658	12,366	12,326	-1
Sulfur	1.19	R 1.16	1.16	1.12	1.10	2.6
Ash	7.26	R 7.02	7.17	7.09	7.00	3.5
East North Central						
Btu	11,939	12,013	11,990	12,022	11,947	-6
Sulfur	1.48	R 1.56	1.52	1.46	1.52	-5.1
Ash	7.59	R 7.55	7.34	7.59	7.61	.6
Illinois²						
Btu	11,346	11,351	11,332	11,290	11,387	*
Sulfur	1.97	1.95	1.89	1.82	1.94	1.2
Ash	7.67	7.45	7.41	7.49	7.66	2.8
Indiana²						
Btu	11,941	11,867	11,826	11,894	11,641	.6
Sulfur	1.28	1.35	1.32	1.20	1.45	-5.3
Ash	7.32	7.07	7.02	7.38	7.50	3.5
Michigan²						
Btu	12,439	12,506	12,440	12,386	12,470	-5
Sulfur .....	.99	1.04	.96	.96	1.02	-5.0
Ash	7.47	R 7.67	6.80	7.60	7.82	-2.6
Ohio²						
Btu	12,310	12,348	12,415	12,424	12,429	-3
Sulfur	1.68	R 1.80	1.82	1.69	1.60	-6.5
Ash	8.17	8.52	8.27	7.79	7.66	-4.0
Wisconsin						
Btu	11,876	12,453	12,330	12,450	11,873	-4.6
Sulfur	1.37	1.68	2.05	2.14	1.52	-18.6
Ash	7.40	7.45	7.72	8.40	7.30	-7
West North Central						
Btu	8,626	8,716	8,702	8,669	8,710	-1.0
Sulfur .....	.95	.87	.87	.89	.88	9.0
Ash	6.34	6.44	6.40	6.54	6.56	-1.6
Iowa						
Btu	10,292	10,261	10,373	10,332	10,480	.3
Sulfur	1.01	.95	1.04	.96	.98	6.1
Ash	6.38	6.25	6.40	6.44	6.38	2.1
Kansas						
Btu	12,344	12,287	12,243	12,197	12,249	.5
Sulfur	3.11	3.12	3.07	3.41	3.11	-2
Ash	9.61	10.75	10.36	11.48	11.04	-10.6

See footnotes at end of table.

Table 107. Average Quality of Coal Received at Manufacturing and Coke Plants by Census Division and State, 1994-1998 (Continued)

Census Division and State and Quality ¹	1998	1997	1996	1995	1994	Percent Change 1997-1998
Minnesota						
Btu	9,626	9,910	10,051	10,280	10,112	-2.9
Sulfur .....	.58	.46	.61	.56	.54	25.8
Ash	5.47	5.24	5.08	4.95	5.15	4.5
Missouri²						
Btu	11,287	11,470	11,541	11,644	11,510	-1.6
Sulfur	2.25	2.23	2.02	1.91	1.92	.7
Ash	7.92	8.39	8.31	9.92	10.10	-5.6
Nebraska						
Btu	10,375	10,201	10,622	10,096	9,931	1.7
Sulfur .....	.52	.32	.36	.42	.40	63.2
Ash	6.46	8.12	8.92	5.73	5.95	-20.5
North Dakota						
Btu	7,138	7,135	7,136	7,171	7,142	*
Sulfur .....	.78	.62	.61	.71	.71	26.1
Ash	6.02	6.10	5.97	6.08	6.14	-1.3
South Dakota						
Btu	9,884	9,786	9,849	9,504	9,418	1.0
Sulfur .....	.81	.81	.83	.86	.77	.5
Ash	8.47	7.38	7.55	7.72	7.15	14.7
South Atlantic						
Btu	13,035	12,988	12,972	12,992	13,043	.4
Sulfur	1.06	1.10	1.09	1.10	1.15	-4.3
Ash	7.95	8.39	8.11	8.07	7.96	-5.3
Delaware						
Btu	13,452	13,450	13,381	13,483	13,300	*
Sulfur	1.17	1.73	1.75	1.87	1.89	-32.4
Ash	6.94	7.01	7.01	7.01	7.73	-1.0
Florida						
Btu	13,022	12,834	12,903	12,865	12,933	1.5
Sulfur .....	.86	.91	.87	.91	.93	-5.7
Ash	7.56	8.38	8.07	8.14	8.93	-9.8
Georgia						
Btu	12,828	12,756	12,873	12,895	13,267	.6
Sulfur .....	.98	1.11	1.11	1.23	1.29	-11.6
Ash	8.30	8.80	8.79	8.78	8.90	-5.7
Maryland²						
Btu	12,656	12,653	12,411	12,598	12,330	*
Sulfur	1.79	1.96	1.92	1.92	1.89	-8.9
Ash	13.98	14.06	14.19	14.52	10.90	-6
North Carolina						
Btu	13,193	13,234	13,243	13,250	13,188	-3
Sulfur .....	.93	.98	.93	.97	.91	-5.4
Ash	7.56	7.53	7.10	6.99	7.20	.4
South Carolina						
Btu	13,106	13,179	13,076	13,051	12,994	-5
Sulfur	1.03	1.00	1.02	1.08	1.12	2.3
Ash	7.87	8.24	8.09	8.24	7.95	-4.5
Virginia²						
Btu	13,204	13,081	12,982	13,067	13,215	.9
Sulfur	1.02	1.05	1.04	1.05	1.05	-2.4
Ash	7.75	8.06	7.97	7.75	7.44	-3.9
West Virginia²						
Btu	12,885	12,782	12,809	12,765	12,780	.8
Sulfur	1.14	1.18	1.14	1.06	1.24	-3.4
Ash	7.04	7.78	7.24	7.28	7.54	-9.4
East South Central						
Btu	12,848	12,750	12,916	12,941	12,869	.8
Sulfur .....	.99	R 1.02	1.06	1.09	1.09	-3.3
Ash	7.45	R 7.34	7.20	7.32	7.51	1.5
Alabama²						
Btu	12,738	12,539	12,632	12,612	12,694	1.6
Sulfur .....	.92	R .98	.98	.94	.98	-5.6
Ash	7.12	R 7.18	6.90	7.07	7.27	-9
Kentucky²						
Btu	12,735	12,831	13,072	13,086	13,150	-8
Sulfur .....	.97	R 1.01	1.05	1.03	.99	-4.2
Ash	6.88	R 6.55	6.59	6.61	6.59	5.1

See footnotes at end of table.

Table 107. Average Quality of Coal Received at Manufacturing and Coke Plants by Census Division and State, 1994-1998 (Continued)

Census Division and State and Quality ¹	1998	1997	1996	1995	1994	Percent Change 1997-1998
Mississippi						
Btu	11,907	11,977	11,911	11,897	11,786	-0.6
Sulfur	2.06	1.55	1.41	1.41	1.44	32.7
Ash	9.33	9.60	9.73	10.66	9.98	-2.8
Tennessee²						
Btu	13,013	12,910	13,103	13,160	12,958	.8
Sulfur	1.03	1.07	1.14	1.35	1.32	-3.8
Ash	8.19	8.01	7.94	8.04	8.47	2.2
West South Central						
Btu	12,111	9,155	9,176	9,116	8,925	32.3
Sulfur	1.16	1.07	1.06	1.00	1.00	8.3
Ash	12.16	11.39	11.36	10.78	11.18	6.8
Arkansas						
Btu	12,545	12,369	12,474	12,573	12,646	1.4
Sulfur	2.03	1.98	2.03	2.02	2.10	2.5
Ash	11.06	10.25	10.27	9.96	10.11	7.9
Louisiana						
Btu	12,534	12,395	12,627	9,292	9,051	1.1
Sulfur	1.23	1.33	1.27	.39	.35	-7.4
Ash	10.47	10.25	10.23	5.29	5.09	2.2
Oklahoma						
Btu	9,970	9,974	9,835	9,995	10,118	*
Sulfur	1.02	.93	.89	.72	.73	9.7
Ash	6.79	6.18	5.97	5.60	6.18	9.9
Texas²						
Btu	12,410	8,789	8,757	8,690	8,447	41.2
Sulfur	1.12	1.02	1.01	1.02	1.04	9.7
Ash	13.08	12.15	12.37	12.20	12.72	7.7
Mountain						
Btu	10,683	10,851	10,699	10,698	10,601	-1.5
Sulfur .....	.73	.72	.67	.71	.68	1.9
Ash	7.44	7.09	7.79	7.28	7.05	5.0
Arizona						
Btu	10,850	12,250	10,603	10,969	11,072	-11.4
Sulfur .....	.59	.76	.53	.54	.48	-22.9
Ash	13.73	10.48	13.15	12.23	11.09	31.1
Colorado						
Btu	11,219	11,293	11,308	11,262	10,785	-7
Sulfur .....	.79	.55	.54	.61	.58	43.1
Ash	7.94	8.03	7.79	7.24	7.00	-1.1
Idaho						
Btu	9,860	10,131	10,148	10,232	9,988	-2.7
Sulfur .....	.84	.72	.72	.78	.79	15.5
Ash	5.31	6.46	6.40	6.22	5.72	-17.8
Montana						
Btu	11,688	8,689	8,695	8,368	8,496	34.5
Sulfur .....	.49	.44	.44	.59	.57	11.4
Ash	6.14	5.27	5.31	7.93	7.65	16.5
Nevada						
Btu	11,495	11,576	11,533	11,698	11,907	-7
Sulfur .....	.51	.50	.51	.48	.26	1.3
Ash	8.90	8.76	8.80	7.13	4.01	1.5
New Mexico						
Btu	12,383	12,507	12,302	12,518	12,688	-1.0
Sulfur .....	.92	.74	.82	.79	.94	24.3
Ash	10.45	10.36	11.67	10.26	9.87	.9
Utah²						
Btu	11,775	11,552	11,589	11,671	11,679	1.9
Sulfur .....	.74	.79	.82	.84	.82	-6.7
Ash	8.18	8.10	8.01	8.08	7.68	1.1
Wyoming						
Btu	10,158	10,119	10,365	10,170	10,098	.4
Sulfur .....	.76	.73	.70	.71	.70	5.1
Ash	4.61	4.66	4.68	4.84	5.27	-1.0

See footnotes at end of table.

Table 107. Average Quality of Coal Received at Manufacturing and Coke Plants by Census Division and State, 1994-1998 (Continued)

Census Division and State and Quality ¹	1998	1997	1996	1995	1994	Percent Change 1997-1998
Pacific						
Btu	11,564	11,513	11,677	11,551	11,749	0.4
Sulfur.....	.57	.57	.56	.53	.52	-1.3
Ash	9.14	8.96	9.15	9.17	8.98	2.0
California						
Btu	11,814	11,759	11,899	11,912	11,950	.5
Sulfur.....	.57	.57	.55	.52	.52	-1.0
Ash	8.99	8.72	8.72	8.62	8.93	3.2
Hawaii						
Btu	7,928	8,704	9,157	9,275	9,576	-8.9
Sulfur.....	.49	.52	.53	.53	.51	-5.1
Ash	12.85	13.22	14.99	15.37	16.72	-2.8
Oregon						
Btu	11,001	10,989	11,159	10,188	10,704	.1
Sulfur.....	.65	.65	.65	.54	.53	.1
Ash	7.00	6.96	7.03	5.98	6.48	.6
Washington						
Btu	11,651	11,818	11,622	11,846	11,818	-1.4
Sulfur.....	.58	.58	.65	.57	.58	1.0
Ash	8.10	8.70	10.00	9.62	5.63	-6.9
U.S. Total						
Btu	11,583	11,407	11,405	11,367	11,316	1.5
Sulfur.....	1.15	^R 1.17	1.17	1.15	1.16	-1.7
Ash	7.71	7.62	7.58	7.61	7.63	1.1

¹ Quality units are: Btu (per pound); sulfur (percent by weight); and ash (percent by weight).

² Includes sulfur and ash data for coke plants.

* Data round to zero.

^R Revised Data.

Notes: Btu data are for manufacturing plants only. The national average of coke plant data ranges from .51 to 1.70 for sulfur and 2.6 to 10.1 for ash.

Sources: Energy Information Administration, Form EIA-3A, "Annual Coal Quality Report - Manufacturing Plants"; and Form EIA-5A, "Annual Coal Quality Report - Coke Plants."

Appendix A

Major Coal Producing States

Table A1. Alabama Coal Statistics, 1989, 1994-1998

Category	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Supply (thousand short tons)									
Recoverable Reserves.....	373,714	374,421	451,760	510,406	457,144	507,724	-0.2	-4.9	-3.3
Productive Capacity ¹	27,891	29,081	32,159	32,546	33,049	NA	-4.1	-4.1	NA
Production Total.....	23,013	24,468	24,637	24,640	23,266	27,992	-5.9	-3	-2.1
Underground.....	17,316	18,505	18,217	17,605	14,471	16,327	-6.4	4.6	.6
Surface.....	5,697	5,963	6,420	7,036	8,795	11,665	-4.5	-10.3	-7.6
Capacity Utilization ²	82.45	84.05	76.57	75.52	70.19	NA	-1.9	4.1	NA
Ratio of Recoverable									
Reserves to Production.....	16.2	15.3	18.3	20.7	19.6	18.1	6.1	-4.6	-1.2
Number of Miners.....	4,722	4,928	5,031	5,567	5,418	6,505	-4.2	-3.4	-3.5
Productivity Total ²	2.33	2.39	2.20	2.24	2.25	2.25	-2.5	.8	.4
Underground.....	2.17	2.21	1.95	2.02	1.94	2.00	-1.5	2.9	.9
Surface.....	2.97	3.21	3.50	3.07	3.07	2.72	-7.4	-8	1.0
Producer/Distributor Stocks.....	1,636	1,289	1,031	1,358	1,204	-	26.9	8.0	-
Imports ³	169	214	161	162	178	-	-20.9	-1.3	-
Distribution (thousand short tons)									
Distribution Total.....	23,046	23,921	24,636	25,159	23,750	NA	-3.7	-8	NA
Domestic Distribution Total.....	18,245	18,108	19,772	19,127	19,220	NA	.8	-1.3	NA
Within State.....	17,831	17,489	18,503	18,024	18,351	NA	1.9	-7	NA
To Other States.....	414	619	1,269	1,103	870	NA	-33.2	-16.9	NA
Foreign Distribution Total.....	4,801	5,813	4,864	6,032	4,529	NA	-17.4	1.5	NA
Metallurgical.....	4,743	5,699	4,523	5,330	4,359	NA	-16.8	2.1	NA
Steam.....	59	114	341	702	170	NA	-48.5	-23.4	NA
Overseas Total ⁴	4,801	5,813	4,864	6,032	4,529	NA	-17.4	1.5	NA
Metallurgical.....	4,743	5,699	4,523	5,330	4,359	NA	-16.8	2.1	NA
Steam.....	59	114	341	702	170	NA	-48.5	-23.4	NA
Demand (thousand short tons)									
Consumption Total.....	36,448	36,433	37,052	34,309	31,473	27,537	*	3.7	3.2
Electric Utility.....	31,474	30,840	31,216	28,759	25,817	21,884	2.0	5.1	4.1
Other Industrial.....	2,562	2,565	2,545	2,286	2,394	2,275	-1	1.7	1.3
Coke.....	w	2,956	3,247	3,257	3,253	3,314	w	w	w
Residential/Commercial.....	9	73	44	7	11	63	-87.0	-2.9	-19.0
Consumer Stocks Total.....	3,577	2,971	2,858	3,648	4,132	4,189	20.4	-3.5	-1.7
Electric Utility.....	3,195	2,609	2,526	3,282	3,652	3,721	22.5	-3.3	-1.7
All Other.....	381	362	332	366	480	468	5.3	-5.6	-2.2
Coal Prices (nominal dollars per short ton)									
Mine Total.....	\$37.23	\$38.48	\$39.48	\$38.44	\$40.12	\$41.18	-3.2	-1.8	-1.1
Underground.....	37.69	39.54	40.75	39.26	39.92	38.96	-4.7	-1.4	-4
Surface.....	35.89	35.15	35.87	36.38	40.45	44.31	2.1	-2.9	-2.3
Consumer.....									
Electric Utility.....	\$36.28	35.58	36.39	37.00	40.42	44.84	1.9	-2.7	-2.3
Other Industrial.....	39.49	40.20	40.15	39.53	38.74	40.36	-1.8	.5	-2
Coke.....	w	50.04	49.37	48.42	47.45	46.67	w	w	w

¹ For 1989, the Form EIA-7A solicited data on "Daily Productive Capacity." As a result, data for annual productive capacity is not available for that year.

² Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

³ Imports for 1994 through 1998 include imports to electric utilities, manufacturing plants and coke plants. Imports for 1989 include only imports to electric utilities.

⁴ Includes Mexico.

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants"; Form EIA-5, "Coke Plant Report - Quarterly"; Form EIA-6A, "Coal Distribution Report"; Form EIA-7A, "Coal Production Report"; Form EIA-759, "Monthly Power Plant Report"; and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table A2. Arizona Coal Statistics, 1989, 1994-1998

Category	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Supply (thousand short tons)									
Recoverable Reserves.....	w	w	w	w	w	w	w	w	w
Productive Capacity ¹	w	w	w	w	w	NA	w	w	NA
Production Total.....	11,315	11,723	10,442	11,947	13,056	11,935	-3.5	-3.5	-0.6
Surface.....	11,315	11,723	10,442	11,947	13,056	11,935	-3.5	-3.5	-0.6
Capacity Utilization ²	w	w	w	w	w	NA	w	w	NA
Ratio of Recoverable									
Reserves to Production.....	w	w	w	w	w	w	w	w	w
Number of Miners.....	730	676	651	831	864	780	8.0	-4.1	-7
Productivity Total ²	6.43	6.79	6.30	6.34	6.71	6.25	-5.3	-1.0	.3
Surface.....	6.43	6.79	6.30	6.34	6.71	6.25	-5.3	-1.0	.3
Producer/Distributor Stocks.....	2,077	2,911	2,232	2,760	2,634	-	-28.6	-5.8	-
Distribution (thousand short tons)									
Distribution Total.....	12,169	11,044	10,970	11,783	12,011	NA	10.2	.3	NA
Domestic Distribution Total.....	12,169	11,044	10,970	11,783	12,011	NA	10.2	.3	NA
Within State.....	7,680	6,646	6,499	6,956	7,580	NA	15.6	.3	NA
To Other States.....	4,489	4,398	4,470	4,827	4,431	NA	2.1	.3	NA
Demand (thousand short tons)									
Consumption Total.....	19,014	18,205	16,792	16,682	19,580	16,871	4.4	-7	1.3
Electric Utility.....	18,316	17,503	16,117	16,021	18,853	16,182	4.6	-7	1.4
Other Industrial.....	698	702	675	657	727	w	-6	-1.0	w
Residential/Commercial.....	*	*	*	5	*	w	73.5	39.0	w
Consumer Stocks Total.....	1,925	1,414	2,024	3,032	3,242	3,411	36.1	-12.2	-6.1
Electric Utility.....	1,855	1,386	1,992	2,998	3,197	3,367	33.9	-12.7	-6.4
All Other.....	70	28	32	34	45	w	146.5	11.8	w
Coal Prices (nominal dollars per short ton)									
Mine Total.....	w	w	w	w	w	w	w	w	w
Surface.....	w	w	w	w	w	w	w	w	w
Consumer									
Electric Utility.....	\$27.12	\$28.95	\$29.55	\$28.65	\$28.26	\$28.81	-6.3	-1.0	-7
Other Industrial.....	38.67	38.81	39.27	40.46	41.35	39.78	-3	-1.6	-3

¹ For 1989, the Form EIA-7A solicited data on "Daily Productive Capacity." As a result, data for annual productive capacity is not available for that year.

² Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants"; Form EIA-5, "Coke Plant Report - Quarterly"; Form EIA-6A, "Coal Distribution Report"; Form EIA-7A, "Coal Production Report"; Form EIA-759, "Monthly Power Plant Report"; and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table A3. Colorado Coal Statistics, 1989, 1994-1998

Category	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Supply (thousand short tons)									
Recoverable Reserves.....	540,199	567,538	641,615	692,030	676,272	662,076	-4.8	-5.5	-2.2
Productive Capacity ¹	36,658	35,466	29,330	32,435	31,075	NA	3.4	4.2	NA
Production Total.....	29,631	27,449	24,886	25,710	25,304	17,123	7.9	4.0	6.3
Underground.....	19,705	17,820	15,581	17,187	16,332	8,511	10.6	4.8	9.8
Surface.....	9,926	9,628	9,305	8,523	8,972	8,612	3.1	2.5	1.6
Capacity Utilization ²	80.83	77.39	84.85	79.27	81.41	NA	4.4	-2	NA
Ratio of Recoverable Reserves to Production.....	18.2	20.7	25.8	26.9	26.7	38.7	-11.8	-9.1	-8.0
Number of Miners.....	1,684	1,362	1,332	1,777	1,905	2,019	23.6	-3.0	-2.0
Productivity Total ²	8.47	7.68	7.32	6.14	6.20	4.08	10.2	8.1	8.4
Underground.....	8.27	7.44	6.67	5.86	5.81	2.91	11.1	9.2	12.3
Surface.....	8.89	8.17	8.76	6.79	7.06	6.74	8.8	5.9	3.1
Producer/Distributor Stocks.....	1,594	1,364	494	1,063	1,575	-	16.9	.3	-
Distribution (thousand short tons)									
Distribution Total.....	29,294	26,968	25,405	25,635	24,810	NA	8.6	4.2	NA
Domestic Distribution Total.....	27,541	25,445	23,990	24,734	24,059	NA	8.2	3.4	NA
Within State.....	11,993	12,307	10,704	11,820	12,035	NA	-2.5	-1	NA
To Other States.....	15,547	13,138	13,286	12,915	12,024	NA	18.3	6.6	NA
Foreign Distribution Total.....	1,754	1,523	1,415	900	752	NA	15.1	23.6	NA
Metallurgical.....	-	-	30	-	-	NA	-	-	NA
Steam.....	1,754	1,523	1,385	900	752	NA	15.1	23.6	NA
Overseas Total ³	1,754	1,523	1,415	900	752	NA	15.1	23.6	NA
Metallurgical.....	-	-	30	-	-	NA	-	-	NA
Steam.....	1,754	1,523	1,385	900	752	NA	15.1	23.6	NA
Demand (thousand short tons)									
Consumption Total.....	18,033	17,960	17,222	16,971	17,475	16,393	.4	.8	1.1
Electric Utility.....	17,663	17,116	16,841	16,222	16,596	15,686	3.2	1.6	1.3
Other Industrial.....	353	780	367	729	857	643	-54.8	-19.9	-6.4
Residential/Commercial.....	18	65	13	20	23	w	-72.7	-6.3	w
Consumer Stocks Total.....	2,862	2,476	3,054	3,682	3,145	w	15.6	-2.3	w
Electric Utility.....	2,840	2,458	3,027	3,622	3,118	3,921	15.5	-2.3	-3.5
All Other.....	23	18	27	59	26	w	25.1	-3.6	w
Coal Prices (nominal dollars per short ton)									
Mine Total.....	\$17.30	\$18.46	\$17.94	\$19.26	\$19.76	\$23.64	-6.3	-3.3	-3.4
Underground.....	16.38	18.50	17.73	18.58	19.05	26.02	-11.5	-3.7	-5.0
Surface.....	16.99	18.40	18.28	20.63	21.05	21.29	-7.7	-2.4	-2.5
Consumer									
Electric Utility.....	\$19.41	19.93	20.24	20.73	21.01	20.95	-2.6	-2.0	-1.8
Other Industrial.....	23.75	25.13	23.17	26.11	28.96	27.81	-5.5	-4.8	-1.7

¹ For 1989, the Form EIA-7A solicited data on "Daily Productive Capacity." As a result, data for annual productive capacity is not available for that year.

² Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

³ Includes Mexico.

w Withheld to avoid disclosure of individual company data.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants"; Form EIA-5, "Coke Plant Report - Quarterly"; Form EIA-6A, "Coal Distribution Report"; Form EIA-7A, "Coal Production Report"; Form EIA-759, "Monthly Power Plant Report"; and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table A4. Illinois Coal Statistics, 1989, 1994-1998

Category	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Supply (thousand short tons)									
Recoverable Reserves.....	743,592	744,512	891,109	882,323	963,470	1,380,697	-0.1	-6.3	-6.6
Productive Capacity ¹	47,625	51,523	61,727	56,627	69,414	NA	-7.6	-9.0	NA
Production Total.....	39,732	41,159	46,656	48,180	52,797	59,267	-3.5	-6.9	-4.3
Underground.....	35,251	34,824	38,948	41,118	43,281	39,337	1.2	-5.0	-1.2
Surface.....	4,482	6,334	7,707	7,062	9,516	19,930	-29.2	-17.1	-15.3
Capacity Utilization ²	83.43	79.87	75.58	85.08	76.06	NA	4.4	2.3	NA
Ratio of Recoverable									
Reserves to Production.....	18.7	18.1	19.1	18.3	18.3	23.3	3.5	.6	-2.4
Number of Miners.....	4,102	4,612	5,174	5,652	6,591	10,003	-11.0	-11.2	-9.4
Productivity Total ²	4.23	4.20	4.18	3.87	3.59	2.77	.8	4.2	4.8
Underground.....	4.24	4.07	4.10	3.86	3.49	2.41	4.3	4.9	6.5
Surface.....	4.16	5.11	4.67	3.89	4.12	3.96	-18.5	.2	.5
Producer/Distributor Stocks.....	952	1,358	1,190	2,069	1,651	-	-29.9	-12.8	-
Imports ³	61	148	216	223	346	-	-59.0	-35.3	-
Distribution (thousand short tons)									
Distribution Total.....	39,754	41,220	47,076	47,869	51,973	NA	-3.6	-6.5	NA
Domestic Distribution Total.....	39,447	40,447	45,190	45,170	51,737	NA	-2.5	-6.6	NA
Within State.....	16,652	18,085	16,052	15,587	17,517	NA	-7.9	-1.3	NA
To Other States.....	22,795	22,362	29,137	29,582	34,220	NA	1.9	-9.7	NA
Foreign Distribution Total.....	307	773	1,886	2,699	236	NA	-60.3	6.7	NA
Metallurgical.....	-	-	-	49	236	NA	-	-100.0	NA
Steam.....	307	773	1,886	2,650	-	NA	-60.3	-	NA
Overseas Total ⁴	307	773	1,886	2,699	236	NA	-60.3	6.7	NA
Metallurgical.....	-	-	-	49	236	NA	-	-	NA
Steam.....	307	773	1,886	2,650	-	NA	-60.3	-	NA
Demand (thousand short tons)									
Consumption Total.....	44,630	47,621	44,431	39,623	39,077	32,374	-6.3	3.4	3.6
Electric Utility.....	38,255	41,017	38,090	33,463	32,599	25,758	-6.7	4.1	4.5
Other Industrial.....	3,813	3,863	3,740	3,653	4,187	3,770	-1.3	-2.3	.1
Coke.....	w	w	w	w	w	2,549	w	w	w
Residential/Commercial.....	w	w	w	w	w	298	w	w	w
Consumer Stocks Total.....	w	w	w	w	w	8,952	w	w	w
Electric Utility.....	6,572	4,828	4,578	5,331	4,526	8,204	36.1	9.8	-2.4
All Other.....	w	w	w	w	w	749	w	w	w
Coal Prices (nominal dollars per short ton)									
Mine Total.....	\$22.86	\$21.44	\$22.74	\$23.05	\$23.14	\$28.17	6.6	-3	-2.3
Underground.....	22.96	22.22	23.12	22.88	23.18	28.66	3.3	-2	-2.4
Surface.....	22.07	17.12	20.86	24.04	22.92	27.20	28.9	-9	-2.3
Consumer.....									
Electric Utility.....	\$30.22	30.41	32.14	32.58	32.69	38.78	-.6	-1.9	-2.7
Other Industrial.....	29.46	29.76	29.69	29.03	29.13	31.17	-1.0	.3	-6
Coke.....	w	w	w	w	w	46.67	w	w	w

¹ For 1989, the Form EIA-7A solicited data on "Daily Productive Capacity." As a result, data for annual productive capacity is not available for that year.

² Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

³ Imports for 1994 through 1998 include imports to electric utilities, manufacturing plants and coke plants. Imports for 1989 include only imports to electric utilities.

⁴ Includes Mexico.

w Withheld to avoid disclosure of individual company data.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants"; Form EIA-5, "Coke Plant Report - Quarterly"; Form EIA-6A, "Coal Distribution Report"; Form EIA-7A, "Coal Production Report"; Form EIA-759, "Monthly Power Plant Report"; and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table A5. Indiana Coal Statistics, 1989, 1994-1998

Category	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Supply (thousand short tons)									
Recoverable Reserves.....	313,382	393,357	386,063	323,667	304,225	474,909	-20.3	0.7	-4.5
Productive Capacity ¹	42,190	36,999	35,564	35,256	38,931	NA	14.0	2.0	NA
Production Total.....	36,803	35,497	29,670	26,007	30,927	33,641	3.7	4.4	1.0
Underground.....	3,445	3,530	2,963	3,540	3,324	2,519	-2.4	.9	3.5
Surface.....	33,359	31,967	26,707	22,467	27,603	31,122	4.3	4.8	.8
Capacity Utilization ²	87.19	95.94	83.42	73.70	79.37	NA	-9.1	2.4	NA
Ratio of Recoverable									
Reserves to Production.....	8.5	11.1	13.0	12.4	9.8	14.1	-23.1	-3.5	-5.5
Number of Miners.....	2,807	2,712	2,579	2,571	3,206	3,684	3.5	-3.3	-3.0
Productivity Total ²	5.31	5.33	4.98	4.68	4.28	3.86	-4	5.5	3.6
Underground.....	3.62	3.74	3.09	3.22	2.82	2.47	-3.1	6.5	4.4
Surface.....	5.58	5.59	5.34	5.04	4.56	4.04	-3	5.1	3.6
Producer/Distributor Stocks.....	672	698	574	611	803	-	-3.8	-4.4	-
Imports ³	976	474	735	761	593	-	105.8	13.3	-
Distribution (thousand short tons)									
Distribution Total.....	36,774	34,810	29,674	25,695	30,684	NA	5.6	4.6	NA
Domestic Distribution Total.....	36,774	34,805	29,664	25,625	30,477	NA	5.7	4.8	NA
Within State.....	32,872	29,916	24,309	21,185	24,733	NA	9.9	7.4	NA
To Other States.....	3,902	4,889	5,354	4,439	5,744	NA	-20.2	-9.2	NA
Foreign Distribution Total.....	-	5	11	70	206	NA	-100.0	-100.0	NA
Steam.....	-	5	11	70	206	NA	-100.0	-100.0	NA
Canada Total.....	-	-	-	*	-	NA	-	-	NA
Steam.....	-	-	-	*	-	NA	-	-	NA
Overseas Total ⁴	-	5	11	69	206	NA	-100.0	-	NA
Steam.....	-	5	11	69	206	NA	-100.0	-	NA
Demand (thousand short tons)									
Consumption Total.....	66,296	66,042	64,021	62,631	59,996	57,388	.4	2.5	1.6
Electric Utility.....	55,086	54,845	52,855	52,089	50,554	42,378	.4	2.2	2.9
Other Industrial.....	4,395	5,086	4,987	4,373	4,244	4,738	-13.6	.9	-8
Coke.....	w	5,715	5,823	5,883	4,841	9,754	w	w	w
Residential/Commercial.....	371	395	356	287	356	518	-6.2	1.0	-3.6
Consumer Stocks Total.....	8,989	6,643	7,955	9,298	11,707	9,398	35.3	-6.4	-5
Electric Utility.....	8,198	5,822	7,103	8,435	10,449	8,043	40.8	-5.9	.2
All Other.....	791	821	853	863	1,258	1,355	-3.7	-10.9	-5.8
Coal Prices (nominal dollars per short ton)									
Mine Total.....	\$19.68	\$19.62	\$20.24	\$21.71	\$22.28	\$23.55	0.3	-3.0	-2.0
Underground.....	w	w	w	w	w	w	w	w	w
Surface.....	w	w	w	w	w	w	w	w	w
Consumer									
Electric Utility.....	\$23.63	\$24.35	\$24.67	\$25.94	\$26.79	\$29.08	-3.0	-3.1	-2.3
Other Industrial.....	30.21	29.75	31.76	33.14	31.35	32.88	1.5	-9	-9
Coke.....	w	50.75	51.93	52.74	50.90	51.47	w	w	w

¹ For 1989, the Form EIA-7A solicited data on "Daily Productive Capacity." As a result, data for annual productive capacity is not available for that year.

² Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

³ Imports for 1994 through 1998 include imports to electric utilities, manufacturing plants and coke plants. Imports for 1989 include only imports to electric utilities.

⁴ Includes Mexico.

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants"; Form EIA-5, "Coke Plant Report - Quarterly"; Form EIA-6A, "Coal Distribution Report"; Form EIA-7A, "Coal Production Report"; Form EIA-759, "Monthly Power Plant Report"; and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table A6. Kentucky Coal Statistics, 1989, 1994-1998

Category	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Supply (thousand short tons)									
Recoverable Reserves.....	1,175,230	1,330,702	1,255,351	1,279,011	1,365,188	1,513,216	-11.7	-3.7	-2.8
Productive Capacity ¹	186,737	195,453	189,225	203,173	213,427	NA	-4.4	-3.3	NA
Production Total.....	150,295	155,853	152,425	153,739	161,642	167,389	-3.6	-1.8	-1.2
Underground.....	92,832	96,302	94,306	94,207	95,414	99,067	-3.6	-7	-7
Surface.....	57,462	59,551	58,119	59,532	66,227	68,322	-3.5	-3.5	-1.9
Capacity Utilization ²	80.06	79.62	80.38	75.49	75.54	NA	.5	1.5	NA
Ratio of Recoverable Reserves to Production.....	7.8	8.5	8.2	8.3	8.4	9.0	-8.4	-1.9	-1.6
Number of Miners.....	18,025	18,937	18,826	21,125	23,368	30,656	-4.8	-6.3	-5.7
Productivity Total ²	3.73	3.94	3.80	3.57	3.25	2.78	-5.5	3.5	3.3
Underground.....	3.42	3.64	3.53	3.25	2.89	2.54	-6.0	4.3	3.3
Surface.....	4.36	4.57	4.35	4.23	3.96	3.23	-4.5	2.4	3.4
Producer/Distributor Stocks.....	4,651	5,376	4,460	4,777	5,025	-	-13.5	-1.9	-
Distribution (thousand short tons)									
Distribution Total.....	153,102	^R 152,746	152,891	151,466	159,130	NA	.2	-1.0	NA
Domestic Distribution Total.....	146,171	^R 145,526	143,748	141,771	151,963	NA	.4	-1.0	NA
Within State.....	29,690	^R 22,813	25,700	27,140	26,719	NA	30.1	2.7	NA
To Other States.....	116,481	122,713	118,047	114,631	125,244	NA	-5.1	-1.8	NA
Foreign Distribution Total.....	6,931	7,220	9,143	9,695	7,167	NA	-4.0	-8	NA
Metallurgical.....	5,042	4,762	5,303	3,640	3,120	NA	5.9	12.8	NA
Steam.....	1,889	2,458	3,841	6,055	4,047	NA	-23.1	-17.3	NA
Canada Total.....	1,459	739	1,178	777	1,099	NA	97.4	7.3	NA
Metallurgical.....	1,459	739	1,178	777	1,073	NA	97.4	8.0	NA
Steam.....	-	-	-	-	26	NA	-	-	NA
Overseas Total ³	5,472	6,481	7,966	8,918	6,067	NA	-15.6	-2.5	NA
Metallurgical.....	3,583	4,023	4,125	2,863	2,047	NA	-10.9	15.0	NA
Steam.....	1,889	2,458	3,841	6,055	4,021	NA	-23.1	-17.2	NA
Demand (thousand short tons)									
Consumption Total.....	39,235	42,228	40,863	39,516	38,090	32,792	-7.1	.7	2.0
Electric Utility.....	35,842	38,281	37,072	35,707	34,564	29,109	-6.4	.9	2.3
Other Industrial.....	1,829	2,251	2,322	2,250	1,994	2,168	-18.8	-2.1	-1.9
Coke.....	w	w	w	w	w	w	w	w	w
Residential/Commercial.....	232	354	117	130	285	227	-34.5	-5.1	.2
Consumer Stocks Total.....	w	w	w	w	w	w	w	w	w
Electric Utility.....	4,668	4,475	4,119	4,472	4,466	4,299	4.3	1.1	.9
All Other.....	w	w	w	w	w	w	w	w	w
Coal Prices (nominal dollars per short ton)									
Mine Total.....	\$23.82	\$23.72	\$23.91	\$24.79	\$24.88	\$24.97	.4	-1.1	-5
Underground.....	24.23	24.73	24.66	25.18	26.14	25.06	-2.0	-1.9	-4
Surface.....	23.16	22.08	22.68	24.19	23.07	24.84	4.9	.1	-8
Consumer									
Electric Utility.....	\$24.52	24.20	24.43	25.71	27.16	26.13	1.3	-2.5	-7
Other Industrial.....	43.66	44.71	44.02	44.09	43.22	45.27	-2.3	.3	-4
Coke.....	w	w	w	w	w	w	w	w	w

¹ For 1989, the Form EIA-7A solicited data on "Daily Productive Capacity." As a result, data for annual productive capacity is not available for that year.

² Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

³ Includes Mexico.

w Withheld to avoid disclosure of individual company data.

NA Not available.

R Revised Data.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants"; Form EIA-5, "Coke Plant Report - Quarterly"; Form EIA-6A, "Coal Distribution Report"; Form EIA-7A, "Coal Production Report"; Form EIA-759, "Monthly Power Plant Report"; and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table A7. Montana Coal Statistics, 1989, 1994-1998

Category	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Supply (thousand short tons)									
Recoverable Reserves.....	1,191,240	1,167,892	1,308,793	1,250,866	1,282,525	1,513,688	2.0	-1.8	-2.6
Productive Capacity ¹	55,882	56,140	56,175	51,597	51,104	NA	-4	2.3	NA
Production Total.....	42,840	41,005	37,891	39,451	41,640	37,742	4.5	.7	1.4
Underground.....	-	8	147	10	3	-	-100.0	-	-
Surface.....	42,840	40,997	37,744	39,441	41,636	37,742	4.5	.7	1.4
Capacity Utilization ²	76.66	73.03	67.45	76.44	81.47	NA	5.0	-1.5	NA
Ratio of Recoverable									
Reserves to Production.....	27.8	28.5	34.5	31.7	30.8	40.1	-2.4	-2.5	-4.0
Number of Miners.....	811	708	705	722	705	682	14.5	3.6	1.9
Productivity Total ²	26.11	23.56	21.88	21.06	21.92	18.94	10.8	4.5	3.6
Underground.....	-	-	3.50	-	-	-	-	-	-
Surface.....	26.11	23.56	22.34	21.06	21.92	18.94	10.8	4.5	3.6
Producer/Distributor Stocks.....	745	682	580	718	635	-	9.3	4.1	-
Distribution (thousand short tons)									
Distribution Total.....	42,674	40,942	38,288	39,620	41,916	NA	4.2	.4	NA
Domestic Distribution Total.....	41,860	40,363	37,770	39,362	41,672	NA	3.7	.1	NA
Within State.....	10,360	9,019	7,844	9,477	10,581	NA	14.9	-5	NA
To Other States.....	31,500	31,345	29,926	29,885	31,092	NA	.5	.3	NA
Foreign Distribution Total.....	814	579	518	259	243	NA	40.6	35.3	NA
Steam.....	814	579	518	259	243	NA	40.6	35.3	NA
Canada Total.....	814	438	316	259	90	NA	85.7	73.5	NA
Steam.....	814	438	316	259	90	NA	85.7	73.5	NA
Overseas Total ³	-	141	202	-	153	NA	-100.0	-	NA
Steam.....	-	141	202	-	153	NA	-100.0	-	NA
Demand (thousand short tons)									
Consumption Total.....	10,724	9,517	8,032	10,005	11,089	10,458	12.7	-8	.3
Electric Utility.....	10,627	9,286	7,897	9,373	10,513	10,208	14.4	.3	.4
Other Industrial.....	93	149	130	621	572	197	-37.3	-36.4	-8.0
Residential/Commercial.....	w	w	w	w	w	w	w	w	w
Consumer Stocks Total.....	w	w	w	w	w	w	w	w	w
Electric Utility.....	335	410	508	511	517	813	-18.3	-10.3	-9.4
All Other.....	w	w	w	w	w	w	w	w	w
Coal Prices (nominal dollars per short ton)									
Mine Total.....	\$8.25	\$9.84	\$9.96	\$9.62	\$10.39	\$10.27	-16.1	-5.6	-2.4
Underground.....	-	-	w	-	-	-	-	-	-
Surface.....	\$8.25	9.84	w	9.62	10.39	10.27	-16.1	-5.6	-2.4
Consumer									
Electric Utility.....	\$11.36	11.52	\$11.90	11.47	11.79	9.81	-1.3	-9	1.6
Other Industrial.....	w	w	w	w	w	w	w	w	w

¹ For 1989, the Form EIA-7A solicited data on "Daily Productive Capacity." As a result, data for annual productive capacity is not available for that year.

² Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

³ Includes Mexico.

w Withheld to avoid disclosure of individual company data.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants"; Form EIA-5, "Coke Plant Report - Quarterly"; Form EIA-6A, "Coal Distribution Report"; Form EIA-7A, "Coal Production Report"; Form EIA-759, "Monthly Power Plant Report"; and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table A8. New Mexico Coal Statistics, 1989, 1994-1998

Category	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Supply (thousand short tons)									
Recoverable Reserves.....	1,384,761	1,415,028	1,436,359	1,479,956	1,457,523	1,410,747	-2.1	-1.3	-0.2
Productive Capacity ¹	32,790	31,604	32,695	32,760	32,807	NA	3.8	*	NA
Production Total.....	28,597	27,025	24,067	26,813	28,041	23,702	5.8	.5	2.1
Underground.....	203	-	-	640	950	45	-	-32.0	18.2
Surface.....	28,394	27,025	24,067	26,173	27,091	23,657	5.1	1.2	2.0
Capacity Utilization ²	87.21	85.51	73.61	81.85	85.47	NA	2.0	.5	NA
Ratio of Recoverable									
Reserves to Production.....	48.4	52.4	59.7	55.2	52.0	59.5	-7.5	-1.8	-2.3
Number of Miners.....	1,582	1,339	1,347	1,747	1,786	1,470	18.1	-3.0	.8
Productivity Total ²	8.68	9.37	8.45	6.92	6.77	7.93	-7.4	6.4	1.0
Underground.....	5.78	-	-	2.68	2.57	1.03	-	22.5	21.1
Surface.....	8.71	9.37	8.45	7.19	7.18	8.03	-7.0	4.9	.9
Producer/Distributor Stocks.....	1,916	1,023	1,890	2,015	1,467	-	87.2	6.9	-
Distribution (thousand short tons)									
Distribution Total.....	28,026	27,377	25,043	26,154	28,570	NA	2.4	-5	NA
Domestic Distribution Total.....	28,026	27,352	25,035	25,640	28,540	NA	2.5	-4	NA
Within State.....	15,819	15,786	15,009	14,630	15,464	NA	.2	.6	NA
To Other States.....	12,206	11,566	10,026	11,010	13,076	NA	5.5	-1.7	NA
Foreign Distribution Total.....	-	25	9	514	30	NA	-100.0	-100.0	NA
Steam.....	-	25	9	514	30	NA	-100.0	-100.0	NA
Overseas Total ³	-	25	9	514	30	NA	-100.0	-	NA
Steam.....	-	25	9	514	30	NA	-100.0	-	NA
Demand (thousand short tons)									
Consumption Total.....	15,963	15,887	15,297	15,221	15,374	15,295	.5	.9	.5
Electric Utility.....	15,883	15,802	15,215	15,137	15,297	15,250	.5	.9	.4
Other Industrial.....	w	w	w	w	w	w	w	w	w
Residential/Commercial.....	w	w	w	w	w	w	w	w	w
Consumer Stocks Total.....	w	w	w	w	w	w	w	w	w
Electric Utility.....	789	795	815	967	1,462	1,403	-8	-14.3	-6.2
All Other.....	4	w	w	w	w	w	w	w	w
Coal Prices (nominal dollars per short ton)									
Mine Total.....	\$20.68	\$21.83	\$24.66	\$23.80	\$23.29	\$23.42	-5.3	-2.9	-1.4
Underground.....	w	-	-	w	w	w	w	w	w
Surface.....	w	21.83	24.66	w	w	w	w	w	w
Consumer									
Electric Utility.....	\$23.72	24.23	26.04	\$25.59	\$25.48	\$22.61	-2.1	-1.8	.5
Other Industrial.....	w	w	w	w	w	w	w	w	w

¹ For 1989, the Form EIA-7A solicited data on "Daily Productive Capacity." As a result, data for annual productive capacity is not available for that year.

² Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

³ Includes Mexico.

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants"; Form EIA-5, "Coke Plant Report - Quarterly"; Form EIA-6A, "Coal Distribution Report"; Form EIA-7A, "Coal Production Report"; Form EIA-759, "Monthly Power Plant Report"; and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table A9. North Dakota Coal Statistics, 1989, 1994-1998

Category	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Supply (thousand short tons)									
Recoverable Reserves.....	1,169,618	1,210,828	1,301,400	1,667,596	1,694,548	1,360,556	-3.4	-8.8	-1.7
Productive Capacity ¹	32,484	32,568	32,184	34,464	35,920	NA	-3	-2.5	NA
Production Total.....	29,912	29,580	29,861	30,112	32,286	29,566	1.1	-1.9	.1
Surface.....	29,912	29,580	29,861	30,112	32,286	29,566	1.1	-1.9	.1
Capacity Utilization ²	92.08	90.82	92.78	87.37	89.88	NA	1.4	.6	NA
Ratio of Recoverable									
Reserves to Production.....	39.1	40.9	43.6	55.4	52.5	46.0	-4.5	-7.1	-1.8
Number of Miners.....	895	657	640	716	645	850	36.2	8.5	.6
Productivity Total ²	17.36	17.82	17.20	16.80	18.84	15.69	-2.6	-2.0	1.1
Surface.....	17.36	17.82	17.20	16.80	18.84	15.69	-2.6	-2.0	1.1
Producer/Distributor Stocks.....	2,364	1,965	1,574	1,797	1,812	-	20.3	6.9	-
Distribution (thousand short tons)									
Distribution Total.....	30,557	29,172	30,025	30,118	32,056	NA	4.8	-1.2	NA
Domestic Distribution Total.....	30,557	29,172	30,025	30,118	32,056	NA	4.8	-1.2	NA
Within State.....	30,557	29,172	30,025	28,838	29,731	NA	4.8	.7	NA
To Other States.....	-	-	-	1,281	2,325	NA	-	-	NA
Demand (thousand short tons)									
Consumption Total.....	31,060	29,360	30,511	30,237	30,363	27,401	5.8	.6	1.4
Electric Utility.....	24,278	22,754	23,640	22,680	23,248	20,538	6.7	1.1	1.9
Other Industrial.....	w	w	w	w	w	w	w	w	w
Residential/Commercial.....	w	w	w	w	w	w	w	w	w
Consumer Stocks Total.....	w	w	w	w	w	w	w	w	w
Electric Utility.....	1,580	1,755	1,642	1,858	2,406	3,731	-9.9	-10.0	-9.1
All Other.....	w	w	w	w	w	w	w	w	w
Coal Prices (nominal dollars per short ton)									
Mine Total.....	\$8.01	\$8.06	\$8.01	\$7.99	\$7.62	\$7.36	-.6	1.3	.9
Surface.....	\$8.01	8.06	8.01	7.99	7.62	7.36	-.6	1.3	.9
Consumer									
Electric Utility.....	\$10.01	10.21	9.72	9.65	9.28	9.13	-2.0	1.9	1.0
Other Industrial.....	w	w	w	w	w	w	w	w	w

¹ For 1989, the Form EIA-7A solicited data on "Daily Productive Capacity." As a result, data for annual productive capacity is not available for that year.

² Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

^w Withheld to avoid disclosure of individual company data.

^{NA} Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants"; Form EIA-5, "Coke Plant Report - Quarterly"; Form EIA-6A, "Coal Distribution Report"; Form EIA-7A, "Coal Production Report"; Form EIA-759, "Monthly Power Plant Report"; and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table A10. Ohio Coal Statistics, 1989, 1994-1998

Category	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Supply (thousand short tons)									
Recoverable Reserves.....	356,132	318,428	414,759	467,984	479,235	814,583	11.8	-7.1	-8.8
Productive Capacity ¹	33,691	33,443	37,584	34,011	43,925	NA	.7	-6.4	NA
Production Total.....	28,048	29,154	28,572	26,118	29,897	33,689	-3.8	-1.6	-2.0
Underground.....	14,604	16,949	15,912	13,077	13,607	10,824	-13.8	1.8	3.4
Surface.....	13,444	12,205	12,660	13,041	16,290	22,865	10.1	-4.7	-5.7
Capacity Utilization ²	83.13	87.07	75.88	76.55	67.87	NA	-4.5	5.2	NA
Ratio of Recoverable									
Reserves to Production.....	12.7	10.9	14.5	17.9	16.0	24.2	16.3	-5.6	-6.9
Number of Miners.....	3,199	3,124	3,232	3,386	3,983	7,374	2.4	-5.3	-8.9
Productivity Total ²	3.63	4.02	3.95	3.62	3.42	2.33	-9.6	1.5	5.1
Underground.....	3.61	4.18	4.19	3.81	3.51	2.00	-13.6	.7	6.8
Surface.....	3.66	3.81	3.69	3.46	3.34	2.52	-4.0	2.3	4.2
Producer/Distributor Stocks.....	1,276	774	532	1,374	833	-	64.8	11.3	-
Imports ³	-	1	1	1	2	-	-100.0	-100.0	-
Distribution (thousand short tons)									
Distribution Total.....	27,166	29,434	28,881	24,345	28,749	NA	-7.7	-1.4	NA
Domestic Distribution Total.....	26,503	29,024	28,609	24,318	28,688	NA	-8.7	-2.0	NA
Within State.....	23,091	24,521	24,478	20,228	23,907	NA	-5.8	-9	NA
To Other States.....	3,412	4,502	4,131	4,090	4,782	NA	-24.2	-8.1	NA
Foreign Distribution Total.....	663	410	271	28	61	NA	61.5	81.7	NA
Steam.....	663	410	271	28	61	NA	61.5	81.7	NA
Canada Total.....	204	-	3	13	-	NA	-	-	NA
Steam.....	204	-	3	13	-	NA	-	-	NA
Overseas Total ⁴	459	410	269	15	61	NA	11.8	65.7	NA
Steam.....	459	410	269	15	61	NA	11.8	65.7	NA
Demand (thousand short tons)									
Consumption Total.....	60,338	58,933	59,835	56,580	56,711	61,016	2.4	1.6	-.1
Electric Utility.....	54,455	52,893	53,543	49,785	49,326	50,479	2.9	2.5	.8
Other Industrial.....	3,666	3,863	3,794	3,609	3,794	4,727	-5.1	-8	-2.8
Coke.....	w	1,848	1,842	2,777	3,092	5,265	w	w	w
Residential/Commercial.....	391	329	656	409	498	545	18.9	-5.9	-3.6
Consumer Stocks Total.....	6,175	6,324	5,428	5,936	7,815	7,055	-2.3	-5.7	-1.5
Electric Utility.....	5,902	6,066	5,229	5,661	7,499	6,607	-2.7	-5.8	-1.2
All Other.....	273	257	199	275	316	449	6.2	-3.6	-5.3
Coal Prices (nominal dollars per short ton)									
Mine Total.....	\$27.56	\$23.66	\$24.85	\$25.97	\$29.13	\$30.49	16.5	-1.4	-1.1
Underground.....	28.48	25.16	25.98	28.98	31.61	37.30	13.2	-2.6	-3.0
Surface.....	26.61	21.57	23.43	22.92	27.04	27.24	23.4	-4	-3
Consumer									
Electric Utility.....	\$32.52	31.41	32.31	34.44	34.70	35.21	3.5	-1.6	-9
Other Industrial.....	33.52	34.05	35.28	35.18	35.75	33.79	-1.5	-1.6	-1
Coke.....	w	46.89	44.98	42.18	42.02	47.02	w	w	w

¹ For 1989, the Form EIA-7A solicited data on "Daily Productive Capacity." As a result, data for annual productive capacity is not available for that year.

² Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

³ Imports for 1994 through 1998 include imports to electric utilities, manufacturing plants and coke plants. Imports for 1989 include only imports to electric utilities.

⁴ Includes Mexico.

w Withheld to avoid disclosure of individual company data.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants"; Form EIA-5, "Coke Plant Report - Quarterly"; Form EIA-6A, "Coal Distribution Report"; Form EIA-7A, "Coal Production Report"; Form EIA-759, "Monthly Power Plant Report"; and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table A11. Pennsylvania Coal Statistics, 1989, 1994-1998

Category	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Supply (thousand short tons)									
Recoverable Reserves.....	774,846	905,320	796,035	736,601	912,870	1,184,077	-14.4	-4.0	-4.6
Productive Capacity ¹	94,511	87,527	81,684	77,187	80,975	NA	8.0	3.9	NA
Production Total.....	81,036	76,198	67,942	61,576	62,237	70,596	6.3	6.8	1.5
Underground.....	59,553	54,829	47,247	41,409	39,974	39,607	8.6	10.5	4.6
Surface.....	21,483	21,369	20,694	20,167	22,263	30,989	.5	-9	-4.0
Capacity Utilization ²	85.28	86.46	82.53	78.81	75.89	NA	-1.4	2.9	NA
Ratio of Recoverable									
Reserves to Production.....	9.6	11.9	11.7	12.0	14.7	16.8	-19.5	-10.1	-6.0
Number of Miners.....	9,443	9,575	9,021	8,968	9,975	15,469	-1.4	-1.4	-5.3
Productivity Total ²	3.71	3.63	3.36	3.23	2.98	2.28	2.3	5.6	5.5
Underground.....	4.19	4.05	3.74	3.49	3.18	2.16	3.5	7.1	7.6
Surface.....	2.81	2.86	2.72	2.79	2.67	2.47	-1.6	1.3	1.4
Producer/Distributor Stocks.....	2,682	2,507	3,113	2,487	2,787	-	7.0	-9	-
Imports ³	-	72	80	87	-	-	-100.0	-	-
Distribution (thousand short tons)									
Distribution Total.....	80,525	73,725	69,128	62,240	61,508	NA	9.2	7.0	NA
Domestic Distribution Total.....	72,616	65,027	59,882	53,961	55,207	NA	11.7	7.1	NA
Within State.....	41,917	40,834	39,222	36,147	35,189	NA	2.6	4.5	NA
To Other States.....	30,700	24,193	20,660	17,814	20,018	NA	26.9	11.3	NA
Foreign Distribution Total.....	7,908	8,698	9,246	8,279	6,301	NA	-9.1	5.8	NA
Metallurgical.....	1,912	2,105	1,642	1,467	1,624	NA	-9.2	4.2	NA
Steam.....	5,996	6,593	7,604	6,812	4,677	NA	-9.0	6.4	NA
Canada Total.....	2,286	2,612	1,050	713	844	NA	-12.5	28.3	NA
Metallurgical.....	17	-	-	4	-	NA	-	-	NA
Steam.....	2,269	2,612	1,050	708	844	NA	-13.1	28.1	NA
Overseas Total ⁴	5,623	6,087	8,196	7,566	5,457	NA	-7.6	.8	NA
Metallurgical.....	1,895	2,105	1,642	1,463	1,624	NA	-10.0	3.9	NA
Steam.....	3,728	3,981	6,554	6,103	3,833	NA	-6.4	-7	NA
Demand (thousand short tons)									
Consumption Total.....	54,538	58,591	57,226	55,326	54,094	58,526	-6.9	.2	-8
Electric Utility.....	42,971	42,603	41,076	39,252	38,044	43,241	.9	3.1	-1
Other Industrial.....	3,618	4,410	4,466	4,027	4,044	3,995	-17.9	-2.7	-1.1
Coke.....	w	10,334	10,689	10,858	10,849	9,877	w	w	w
Residential/Commercial.....	841	1,244	995	1,188	1,156	1,413	-32.4	-7.6	-5.6
Consumer Stocks Total.....	9,057	8,658	8,857	10,303	12,060	11,870	4.6	-6.9	-2.9
Electric Utility.....	8,441	7,790	7,878	9,244	11,000	11,069	8.3	-6.4	-3.0
All Other.....	616	868	980	1,059	1,060	801	-29.0	-12.7	-2.9
Coal Prices (nominal dollars per short ton)									
Mine Total.....	\$25.87	\$25.98	\$25.78	\$26.78	\$26.18	\$29.33	-4	-3	-1.4
Underground.....	25.40	26.30	25.79	27.09	26.59	31.75	-3.4	-1.1	-2.4
Surface.....	27.20	25.13	25.76	26.14	25.43	26.19	8.2	1.7	.4
Consumer									
Electric Utility.....	\$33.28	33.28	34.06	33.48	35.39	35.50	*	-1.5	-7
Other Industrial.....	34.33	34.20	33.84	34.07	33.66	35.93	.4	.5	-5
Coke.....	w	46.20	45.16	46.11	46.25	44.77	w	w	w

¹ For 1989, the Form EIA-7A solicited data on "Daily Productive Capacity." As a result, data for annual productive capacity is not available for that year.

² Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

³ Imports for 1994 through 1998 include imports to electric utilities, manufacturing plants and coke plants. Imports for 1989 include only imports to electric utilities.

⁴ Includes Mexico.

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants"; Form EIA-5, "Coke Plant Report - Quarterly"; Form EIA-6A, "Coal Distribution Report"; Form EIA-7A, "Coal Production Report"; Form EIA-759, "Monthly Power Plant Report"; and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table A12. Texas Coal Statistics, 1989, 1994-1998

Category	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Supply (thousand short tons)									
Recoverable Reserves.....	791,111	921,939	878,486	939,901	1,026,309	1,135,326	-14.2	-6.3	-3.9
Productive Capacity ¹	54,475	54,614	59,604	54,758	55,856	NA	-3	-6	NA
Production Total.....	52,583	53,328	55,164	52,684	52,346	53,854	-1.4	.1	-3
Surface.....	52,583	53,328	55,164	52,684	52,346	53,854	-1.4	.1	-3
Capacity Utilization ²	96.53	97.64	92.55	96.21	93.72	NA	-1.1	.7	NA
Ratio of Recoverable									
Reserves to Production.....	15.0	17.3	15.9	17.8	19.6	21.1	-13.0	-6.4	-3.7
Number of Miners.....	2,382	1,363	1,550	1,590	1,733	2,109	74.8	8.3	1.4
Productivity Total ²	10.13	10.24	10.13	9.10	8.82	7.31	-1.1	3.5	3.7
Surface.....	10.13	10.24	10.13	9.10	8.82	7.31	-1.1	3.5	3.7
Producer/Distributor Stocks.....	1,319	1,506	1,254	864	1,430	-	-12.4	-2.0	-
Imports ³	170	99	16	-	153	-	71.3	2.5	-
Distribution (thousand short tons)									
Distribution Total.....	52,935	53,463	49,655	52,832	52,256	NA	-1.0	.3	NA
Domestic Distribution Total.....	52,913	53,463	49,538	52,812	52,256	NA	-1.0	.3	NA
Within State.....	52,769	53,463	49,538	52,812	52,256	NA	-1.3	.2	NA
To Other States.....	144	-	-	-	-	NA	-	-	NA
Foreign Distribution Total.....	22	-	117	20	-	NA	-	-	NA
Steam.....	22	-	117	20	-	NA	-	-	NA
Overseas Total ⁴	22	-	117	20	-	NA	-	-	NA
Steam.....	22	-	117	20	-	NA	-	-	NA
Demand (thousand short tons)									
Consumption Total.....	99,430	101,297	98,997	92,612	93,829	90,989	-1.8	1.5	1.0
Electric Utility.....	94,661	96,537	94,189	88,358	88,479	86,701	-1.9	1.7	1.0
Other Industrial.....	4,755	4,759	4,808	4,255	5,350	4,275	-1	-2.9	1.2
Residential/Commercial.....	14	*	-	-	*	w	257.1	277.7	w
Consumer Stocks Total.....	8,007	6,540	10,477	10,829	9,793	w	22.4	-4.9	w
Electric Utility.....	7,784	6,352	10,287	10,628	9,578	9,329	22.5	-5.0	-2.0
All Other.....	223	188	190	201	215	w	18.4	.8	w
Coal Prices (nominal dollars per short ton)									
Mine Total.....	\$12.47	\$12.15	\$12.17	\$12.16	\$12.38	\$10.91	2.6	.2	1.5
Surface.....	\$12.47	12.15	12.17	12.16	12.38	10.91	2.6	.2	1.5
Consumer									
Electric Utility.....	\$18.61	18.69	19.26	19.65	19.84	21.12	-5	-1.6	-1.4
Other Industrial.....	21.05	20.13	18.99	18.76	19.54	18.45	4.6	1.9	1.5

¹ For 1989, the Form EIA-7A solicited data on "Daily Productive Capacity." As a result, data for annual productive capacity is not available for that year.

² Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

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⁴ Includes Mexico.

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants"; Form EIA-5, "Coke Plant Report - Quarterly"; Form EIA-6A, "Coal Distribution Report"; Form EIA-7A, "Coal Production Report"; Form EIA-759, "Monthly Power Plant Report"; and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table A13. Utah Coal Statistics, 1989, 1994-1998

Category	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Supply (thousand short tons)									
Recoverable Reserves.....	433,354	432,777	284,433	374,750	423,349	518,620	0.1	0.6	-2.0
Productive Capacity ¹	33,838	30,281	30,230	30,888	27,640	NA	11.7	5.2	NA
Production Total.....	26,075	26,683	27,507	25,167	24,399	20,102	-2.3	1.7	2.9
Underground.....	26,075	26,683	27,507	25,167	24,399	20,102	-2.3	1.7	2.9
Capacity Utilization ²	77.06	88.09	90.97	81.48	88.27	NA	-12.5	-3.3	NA
Ratio of Recoverable									
Reserves to Production.....	16.6	16.2	10.3	14.9	17.3	25.8	2.5	-1.1	-4.8
Number of Miners.....	1,919	1,922	1,804	1,893	1,675	2,169	-1	3.4	-1.3
Productivity Total ²	6.42	6.34	7.23	7.02	6.59	4.75	1.4	-6	3.4
Underground.....	6.56	6.34	7.24	7.02	6.59	4.75	3.5	-1	3.6
Producer/Distributor Stocks.....	1,809	2,112	1,337	1,946	1,301	-	-14.3	8.6	-
Distribution (thousand short tons)									
Distribution Total.....	26,765	26,272	23,868	25,521	23,225	NA	1.9	3.6	NA
Domestic Distribution Total.....	24,229	22,857	18,563	21,591	20,527	NA	6.0	4.2	NA
Within State.....	12,531	13,936	9,389	12,755	13,586	NA	-10.1	-2.0	NA
To Other States.....	11,699	8,922	9,174	8,836	6,941	NA	31.1	13.9	NA
Foreign Distribution Total.....	2,535	3,414	5,305	3,930	2,698	NA	-25.8	-1.5	NA
Metallurgical.....	-	97	187	-	-	NA	-100.0	-	NA
Steam.....	2,535	3,317	5,118	3,930	2,698	NA	-23.6	-1.5	NA
Overseas Total ³	2,535	3,414	5,305	3,930	2,698	NA	-25.8	-1.5	NA
Metallurgical.....	-	97	187	-	-	NA	-100.0	-	NA
Steam.....	2,535	3,317	5,118	3,930	2,698	NA	-23.6	-1.5	NA
Demand (thousand short tons)									
Consumption Total.....	16,600	15,923	15,237	15,307	16,216	15,044	4.2	.6	1.1
Electric Utility.....	14,664	14,252	13,584	13,325	14,269	12,949	2.9	.7	1.4
Other Industrial.....	852	527	512	915	835	686	61.5	.5	2.4
Coke.....	w	w	w	w	w	w	w	w	w
Residential/Commercial.....	w	w	w	w	w	w	w	w	w
Consumer Stocks Total.....	w	w	w	w	w	w	w	w	w
Electric Utility.....	2,461	2,309	1,526	2,250	2,753	3,202	6.6	-2.8	-2.9
All Other.....	w	w	w	w	w	w	w	w	w
Coal Prices (nominal dollars per short ton)									
Mine Total.....	\$18.47	\$17.61	\$21.63	\$19.10	\$19.27	\$21.46	4.9	-1.1	-1.6
Underground.....	\$18.47	17.61	21.63	19.10	19.27	21.46	4.9	-1.1	-1.6
Consumer									
Electric Utility.....	\$25.97	25.22	24.66	25.27	26.10	28.05	3.0	-1	-8
Other Industrial.....	19.05	19.28	19.10	19.74	26.57	26.79	-1.2	-8.0	-3.7
Coke.....	w	w	w	w	w	w	w	w	w

¹ For 1989, the Form EIA-7A solicited data on "Daily Productive Capacity." As a result, data for annual productive capacity is not available for that year.

² Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

³ Includes Mexico.

w Withheld to avoid disclosure of individual company data.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants"; Form EIA-5, "Coke Plant Report - Quarterly"; Form EIA-6A, "Coal Distribution Report"; Form EIA-7A, "Coal Production Report"; Form EIA-759, "Monthly Power Plant Report"; and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table A14. Virginia Coal Statistics, 1989, 1994-1998

Category	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Supply (thousand short tons)									
Recoverable Reserves.....	186,861	207,765	188,344	203,159	236,773	419,716	-10.1	-5.7	-8.6
Productive Capacity ¹	38,884	43,023	41,593	43,037	46,462	NA	-9.6	-4.3	NA
Production Total.....	33,747	35,837	35,590	34,099	37,129	43,006	-5.8	-2.3	-2.6
Underground.....	25,212	26,929	25,568	25,372	28,054	36,044	-6.4	-2.6	-3.9
Surface.....	8,535	8,907	10,022	8,727	9,075	6,962	-4.2	-1.5	2.3
Capacity Utilization ²	86.29	83.09	85.34	79.07	79.61	NA	3.8	2.0	NA
Ratio of Recoverable									
Reserves to Production.....	5.5	5.8	5.3	6.0	6.4	9.8	-4.5	-3.5	-6.1
Number of Miners.....	5,734	6,235	6,241	6,919	8,121	10,371	-8.0	-8.3	-6.4
Productivity Total ²	2.76	2.77	2.72	2.50	2.51	2.21	-.5	2.4	2.5
Underground.....	2.56	2.56	2.44	2.25	2.27	2.15	.1	3.1	2.0
Surface.....	3.54	3.69	3.79	3.73	3.73	2.59	-4.0	-1.3	3.6
Producer/Distributor Stocks.....	2,565	2,328	1,644	1,649	1,180	-	10.2	21.4	-
Distribution (thousand short tons)									
Distribution Total.....	33,539	^R 35,577	36,208	34,024	38,548	NA	-5.7	-3.4	NA
Domestic Distribution Total.....	20,728	^R 22,736	22,776	24,283	26,866	NA	-8.8	-6.3	NA
Within State.....	7,602	^R 6,854	7,231	5,657	6,867	NA	10.9	2.6	NA
To Other States.....	13,126	15,882	15,545	18,625	19,999	NA	-17.4	-10.0	NA
Foreign Distribution Total.....	12,810	12,841	13,432	9,742	11,683	NA	-2	2.3	NA
Metallurgical.....	12,649	12,288	12,760	8,921	11,155	NA	2.9	3.2	NA
Steam.....	162	553	671	821	527	NA	-70.7	-25.6	NA
Canada Total.....	719	508	387	445	786	NA	41.7	-2.2	NA
Metallurgical.....	719	508	387	445	786	NA	41.7	-2.2	NA
Overseas Total ³	12,091	12,333	13,044	9,297	10,897	NA	-2.0	2.6	NA
Metallurgical.....	11,929	11,780	12,373	8,475	10,370	NA	1.3	3.6	NA
Steam.....	162	553	671	821	527	NA	-70.7	-25.6	NA
Demand (thousand short tons)									
Consumption Total.....	15,843	15,276	14,983	13,378	12,792	14,279	3.7	5.5	1.2
Electric Utility.....	12,300	11,605	10,994	9,543	8,670	9,573	6.0	9.1	2.8
Other Industrial.....	2,354	2,502	2,613	2,585	2,838	3,576	-5.9	-4.6	-4.5
Coke.....	w	w	w	w	w	w	w	w	w
Residential/Commercial.....	w	w	w	w	w	w	w	w	w
Consumer Stocks Total.....	w	w	w	w	w	w	w	w	w
Electric Utility.....	1,370	1,152	1,010	1,098	2,064	1,368	18.9	-9.7	*
All Other.....	w	w	w	w	w	w	w	w	w
Coal Prices (nominal dollars per short ton)									
Mine Total.....	\$28.69	\$28.24	\$28.45	\$28.47	\$26.84	\$27.64	1.6	1.7	.4
Underground.....	29.55	29.07	29.46	29.20	27.33	28.31	1.7	2.0	.5
Surface.....	26.21	25.74	25.88	26.34	25.33	24.11	1.8	.9	.9
Consumer.....									
Electric Utility.....	\$34.73	34.98	35.73	36.90	37.05	39.29	-.7	-1.6	-1.4
Other Industrial.....	43.60	43.85	43.51	42.50	41.56	38.92	-.5	1.2	1.3
Coke.....	w	w	w	w	w	w	w	w	w

¹ For 1989, the Form EIA-7A solicited data on "Daily Productive Capacity." As a result, data for annual productive capacity is not available for that year.

² Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

³ Includes Mexico.

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

NA Not available.

R Revised Data.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants"; Form EIA-5, "Coke Plant Report - Quarterly"; Form EIA-6A, "Coal Distribution Report"; Form EIA-7A, "Coal Production Report"; Form EIA-759, "Monthly Power Plant Report"; and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table A15. West Virginia Coal Statistics, 1989, 1994-1998

Category	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Supply (thousand short tons)									
Recoverable Reserves.....	1,907,763	1,736,836	1,731,154	1,731,400	1,829,630	2,313,423	9.8	1.0	-2.1
Productive Capacity ¹	203,401	203,006	217,409	204,837	201,684	NA	.2	.2	NA
Production Total.....	171,145	173,743	170,433	162,997	161,776	153,580	-1.5	1.4	1.2
Underground.....	117,191	116,523	115,585	110,029	111,679	113,202	.6	1.2	.4
Surface.....	53,955	57,220	54,848	52,968	50,097	40,378	-5.7	1.9	3.3
Capacity Utilization ²	84.07	85.50	78.32	79.50	80.07	NA	-1.7	1.2	NA
Ratio of Recoverable									
Reserves to Production.....	11.1	10.0	10.2	10.6	11.3	15.1	11.5	-4	-3.3
Number of Miners.....	17,167	18,245	20,121	21,334	21,861	29,482	-5.9	-5.9	-5.8
Productivity Total ²	4.50	4.46	3.91	3.74	3.69	2.77	1.0	5.1	5.5
Underground.....	4.13	4.03	3.50	3.40	3.38	2.59	2.6	5.1	5.3
Surface.....	5.60	5.71	5.18	4.74	4.62	3.49	-1.9	4.9	5.4
Producer/Distributor Stocks.....	6,008	5,504	4,947	6,176	6,692	-	9.2	-2.7	-
Distribution (thousand short tons)									
Distribution Total.....	172,612	172,236	169,200	165,187	158,985	NA	.2	2.1	NA
Domestic Distribution Total.....	135,082	133,777	127,156	120,866	122,779	NA	1.0	2.4	NA
Within State.....	28,451	29,141	29,220	29,018	30,891	NA	-2.4	-2.0	NA
To Other States.....	106,631	104,636	97,936	91,848	91,888	NA	1.9	3.8	NA
Foreign Distribution Total.....	37,531	38,459	42,044	44,321	36,205	NA	-2.4	.9	NA
Metallurgical.....	32,224	30,327	31,717	34,633	31,603	NA	6.3	.5	NA
Steam.....	5,307	8,132	10,327	9,688	4,602	NA	-34.7	3.6	NA
Canada Total.....	10,500	8,291	7,222	5,784	5,644	NA	26.6	16.8	NA
Metallurgical.....	8,945	6,956	6,907	5,759	5,605	NA	28.6	12.4	NA
Steam.....	1,555	1,335	315	25	40	NA	16.5	150.0	NA
Overseas Total ³	27,031	30,168	34,822	38,537	30,561	NA	-10.4	-3.0	NA
Metallurgical.....	23,279	23,370	24,810	28,874	25,998	NA	-4	-2.7	NA
Steam.....	3,752	6,798	10,012	9,663	4,563	NA	-44.8	-4.8	NA
Demand (thousand short tons)									
Consumption Total.....	38,649	37,122	36,139	34,489	34,767	37,186	4.1	2.7	.4
Electric Utility.....	35,132	34,487	32,775	30,657	30,318	32,391	1.9	3.8	.9
Other Industrial.....	1,613	1,652	1,630	1,984	2,637	2,712	-2.3	-11.5	-5.6
Coke.....	w	w	w	w	w	w	w	w	w
Residential/Commercial.....	w	w	w	w	w	w	w	w	w
Consumer Stocks Total.....	w	w	w	w	w	w	w	w	w
Electric Utility.....	3,791	4,042	4,370	4,744	4,479	3,729	-6.2	-4.1	.2
All Other.....	w	w	w	w	w	w	w	w	w
Coal Prices (nominal dollars per short ton)									
Mine Total.....	\$27.07	\$26.64	\$26.58	\$27.18	\$27.42	\$28.69	1.6	-3	-6
Underground.....	28.25	27.64	27.31	27.77	27.93	29.49	2.2	.3	-5
Surface.....	24.50	24.60	25.04	25.95	26.29	26.42	-0.4	-1.7	-8
Consumer									
Electric Utility.....	\$30.06	30.68	30.93	31.61	34.70	35.33	-2.0	-3.5	-1.8
Other Industrial.....	48.24	35.31	33.37	33.61	32.73	30.85	36.6	10.2	5.1
Coke.....	w	w	w	w	w	w	w	w	w

¹ For 1989, the Form EIA-7A solicited data on "Daily Productive Capacity." As a result, data for annual productive capacity is not available for that year.

² Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

³ Includes Mexico.

w Withheld to avoid disclosure of individual company data.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants"; Form EIA-5, "Coke Plant Report - Quarterly"; Form EIA-6A, "Coal Distribution Report"; Form EIA-7A, "Coal Production Report"; Form EIA-759, "Monthly Power Plant Report"; and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table A16. Wyoming Coal Statistics, 1989, 1994-1998

Category	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Supply (thousand short tons)									
Recoverable Reserves.....	7,220,356	6,464,670	6,591,293	6,723,963	6,999,460	6,287,739	11.7	0.8	1.5
Productive Capacity ¹	379,380	366,680	350,908	337,184	321,046	NA	3.5	4.3	NA
Production Total.....	314,409	281,881	278,440	263,822	237,092	171,558	11.5	7.3	7.0
Underground.....	1,723	2,846	2,641	2,008	2,735	1,645	-39.4	-10.9	.5
Surface.....	312,686	279,035	275,799	261,814	234,357	169,913	12.0	7.5	7.0
Capacity Utilization ²	82.87	76.87	79.35	78.24	73.85	NA	7.8	2.9	NA
Ratio of Recoverable Reserves to Production.....	23.0	22.9	23.7	25.5	29.5	36.6	.1	-6.1	-5.1
Number of Miners.....	4,073	2,777	2,814	3,142	3,291	3,351	46.7	5.5	2.2
Productivity Total ²	39.16	34.55	32.06	30.06	26.05	20.28	13.3	10.7	7.6
Underground.....	10.09	10.13	9.18	5.97	5.07	3.21	-4	18.8	13.6
Surface.....	39.79	35.42	32.84	31.02	27.37	21.38	12.3	9.8	7.1
Producer/Distributor Stocks.....	3,873	2,036	1,504	1,997	1,592	-	90.2	24.9	-
Distribution (thousand short tons)									
Distribution Total.....	314,891	280,795	279,117	263,601	235,540	NA	12.1	7.5	NA
Domestic Distribution Total.....	311,162	278,255	276,723	261,333	234,016	NA	11.8	7.4	NA
Within State.....	27,719	26,756	26,253	26,521	28,334	NA	3.6	-5	NA
To Other States.....	283,443	251,499	250,470	234,812	205,682	NA	12.7	8.3	NA
Foreign Distribution Total.....	3,729	2,541	2,395	2,269	1,524	NA	46.8	25.1	NA
Steam.....	3,729	2,541	2,395	2,269	1,524	NA	46.8	25.1	NA
Canada Total.....	1,931	818	443	32	-	NA	136.2	-	NA
Steam.....	1,931	818	443	32	-	NA	136.2	-	NA
Overseas Total ³	1,798	1,723	1,952	2,237	1,524	NA	4.3	4.2	NA
Steam.....	1,798	1,723	1,952	2,237	1,524	NA	4.3	4.2	NA
Demand (thousand short tons)									
Consumption Total.....	28,763	26,096	26,646	25,933	27,459	23,952	10.2	1.2	2.0
Electric Utility.....	26,674	23,997	24,430	23,850	25,350	21,908	11.1	1.3	2.2
Other Industrial.....	1,929	1,959	1,835	1,937	w	w	-1.5	w	w
Residential/Commercial.....	159	140	382	146	242	w	13.3	-9.9	w
Consumer Stocks Total.....	1,320	1,555	2,267	2,936	2,553	w	-15.1	-15.2	w
Electric Utility.....	1,243	1,498	2,197	2,857	2,476	3,337	-17.0	-15.8	-10.4
All Other.....	77	57	71	79	77	w	35.8	.1	w
Coal Prices (nominal dollars per short ton)									
Mine Total.....	\$5.41	\$6.00	\$6.41	\$6.58	\$6.83	\$8.63	-9.8	-5.6	-5.0
Underground.....	w	w	w	w	w	w	w	w	w
Surface.....	w	w	w	w	w	w	w	w	w
Consumer									
Electric Utility.....	\$13.83	\$14.16	\$14.30	\$14.29	\$14.09	\$14.86	-2.3	-4	-8
Other Industrial.....	24.10	23.68	22.32	22.72	22.87	24.14	1.8	1.3	*

¹ For 1989, the Form EIA-7A solicited data on "Daily Productive Capacity." As a result, data for annual productive capacity is not available for that year.

² Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

³ Includes Mexico.

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants"; Form EIA-5, "Coke Plant Report - Quarterly"; Form EIA-6A, "Coal Distribution Report"; Form EIA-7A, "Coal Production Report"; Form EIA-759, "Monthly Power Plant Report"; and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table A17. All Other States Coal Statistics, 1989, 1994-1998

Category	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Supply (thousand short tons)									
Recoverable Reserves.....	361,383	416,535	427,163	420,998	476,538	687,954	-13.2	-6.7	-6.9
Productive Capacity ¹	23,093	24,996	23,441	24,495	23,451	NA	-7.6	-4	NA
Production Total.....	18,353	19,349	19,674	19,911	19,672	25,986	-5.1	-1.7	-3.8
Underground.....	4,618	4,909	5,227	4,880	4,880	6,606	-5.9	-1.4	-3.9
Surface.....	13,734	14,440	14,447	15,031	14,792	19,380	-4.9	-1.8	-3.8
Capacity Utilization ²	79.02	77.22	83.55	81.02	83.52	NA	2.3	-1.4	NA
Ratio of Recoverable Reserves to Production.....	19.7	21.5	21.7	21.1	24.2	26.5	-8.5	-5.0	-3.2
Number of Miners.....	1,982	2,344	2,394	2,312	2,373	4,523	-15.4	-4.4	-8.8
Productivity Total ²	4.25	3.78	3.73	3.96	3.82	2.82	12.6	2.7	4.7
Underground.....	3.63	3.29	2.94	3.03	2.86	1.83	10.2	6.1	7.9
Surface.....	4.52	3.98	4.13	4.41	4.30	3.44	13.7	1.3	3.1
Producer/Distributor Stocks.....	389	R 539	292	784	598	-	-27.9	-10.2	-
Imports ³	6,167	5,192	5,267	5,084	5,327	1,215	18.8	3.7	19.8
Distribution (thousand short tons)									
Distribution Total.....	18,592	R 19,191	19,828	19,080	18,813	NA	-3.1	-3	NA
Domestic Distribution Total.....	18,212	R 18,261	18,285	17,930	17,767	NA	-3	.6	NA
Within State.....	29	24	28	26	25	NA	18.5	3.9	NA
To Other States.....	18,184	R 18,236	18,257	17,904	17,743	NA	-3	.6	NA
Foreign Distribution Total.....	380	931	1,544	1,150	1,046	NA	-59.2	-22.4	NA
Metallurgical.....	-	48	-	38	109	NA	-100.0	-100.0	NA
Steam.....	380	882	1,544	1,112	937	NA	-57.0	-20.2	NA
Canada Total.....	-	*	*	1	3	NA	-100.0	-	NA
Steam.....	-	*	*	1	3	NA	-100.0	-	NA
Overseas Total ⁴	380	931	1,544	1,149	1,042	NA	-59.2	-22.3	NA
Metallurgical.....	-	48	-	38	109	NA	-100.0	-	NA
Steam.....	380	882	1,544	1,112	934	NA	-57.0	-20.1	NA
Demand (thousand short tons)									
Consumption Total.....	416,467	411,134	400,049	382,060	371,817	351,616	1.3	2.9	1.9
Electric Utility.....	382,587	376,543	365,146	344,785	334,773	312,655	1.6	3.4	2.3
Other Industrial.....	28,854	28,989	29,720	31,653	31,795	32,533	-5	-2.4	-1.3
Coke.....	w	2,677	2,686	2,784	2,723	4,401	w	w	w
Residential/Commercial.....	2,004	2,925	2,497	2,838	2,526	2,028	-31.5	-5.6	-1
Consumer Stocks Total.....	63,195	49,227	60,121	62,368	57,506	64,269	28.4	2.4	-2
Electric Utility.....	59,476	45,078	55,817	58,348	53,253	59,718	31.9	2.8	*
All Other.....	3,719	4,148	4,304	4,021	4,252	4,551	-10.3	-3.3	-2.2
Coal Prices (nominal dollars per short ton)									
Mine Total.....	\$23.95	\$23.50	\$24.06	\$22.80	\$23.19	\$24.88	1.9	.8	-4
Underground.....	25.62	24.26	25.78	26.25	26.97	27.63	5.6	-1.3	-8
Surface.....	23.38	23.24	23.44	21.67	21.94	23.95	.6	1.6	-3
Consumer.....									
Electric Utility.....	26.38	27.39	27.46	28.22	29.70	33.31	-3.7	-2.9	-2.5
Other Industrial.....	37.96	38.47	38.22	38.51	38.72	39.20	-1.3	-5	-3
Coke.....	w	49.16	51.21	51.67	50.89	52.45	w	w	w

¹ For 1989, the Form EIA-7A solicited data on "Daily Productive Capacity." As a result, data for annual productive capacity is not available for that year.

² Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

³ Imports for 1994 through 1998 include imports to electric utilities, manufacturing plants and coke plants. Imports for 1989 include only imports to electric utilities.

⁴ Includes Mexico.

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

NA Not available.

R Revised Data.

Notes: Other States include Alaska, Arkansas, California, Iowa, Kansas, Louisiana, Maryland, Missouri, Oklahoma, Tennessee, and Washington. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants"; Form EIA-5, "Coke Plant Report - Quarterly"; Form EIA-6A, "Coal Distribution Report"; Form EIA-7A, "Coal Production Report"; Form EIA-759, "Monthly Power Plant Report"; and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table A18. Total U.S. Coal Statistics, 1989, 1994-1998

Category	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Supply (thousand short tons)									
Recoverable Reserves.....	19,311,283	19,164,398	19,427,980	20,105,197	21,016,526	22,679,827	0.8	-2.1	-1.8
Productive Capacity ¹	1,336,130	1,325,604	1,324,712	1,299,054	1,320,656	NA	.8	.3	NA
Production Total.....	1,117,535	1,089,932	1,063,856	1,032,974	1,033,504	980,729	2.5	2.0	1.5
Underground.....	417,728	420,657	409,849	396,249	399,103	393,835	-7	1.1	.6
Surface.....	699,807	669,274	654,007	636,725	634,401	586,893	4.6	2.5	2.0
Capacity Utilization ²	83.51	82.13	80.21	79.40	78.11	NA	1.7	1.7	NA
Ratio of Recoverable Reserves to Production.....	17.3	17.6	18.3	19.5	20.3	23.1	-1.7	-4.0	-3.2
Number of Miners.....	81,257	81,516	83,462	90,252	97,500	131,497	-3	-4.4	-5.2
Productivity Total ²	6.22	6.04	5.69	5.38	4.98	3.70	3.0	5.7	5.9
Underground.....	3.84	3.83	3.57	3.39	3.19	2.46	.3	4.7	5.1
Surface.....	9.85	9.46	9.05	8.48	7.67	5.61	4.1	6.5	6.5
Producer/Distributor Stocks.....	36,530	33,973	28,648	34,444	33,219	29,000	7.5	2.4	2.6
Imports ³	7,543	6,200	6,476	6,317	6,599	1,215	21.7	3.4	22.5
Distribution (thousand short tons)									
Distribution Total.....	1,122,421	R 1,078,896	1,059,892	1,030,330	1,022,523	NA	4.0	2.4	NA
Domestic Distribution Total.....	1,042,236	R 995,664	967,693	940,423	949,843	NA	4.7	2.3	NA
Within State.....	367,564	R 356,763	340,005	336,821	353,765	NA	3.0	1.0	NA
To Other States.....	674,672	R 638,901	627,688	603,602	596,078	NA	5.6	3.1	NA
Foreign Distribution Total.....	80,185	R 83,232	92,199	89,907	72,680	NA	-3.7	2.5	NA
Metallurgical.....	56,569	R 55,326	56,162	54,077	52,206	NA	2.3	2.0	NA
Steam.....	23,616	R 27,906	36,037	35,830	20,474	NA	-15.4	3.6	NA
Canada Total.....	17,913	13,405	10,599	8,023	8,467	NA	33.6	20.6	NA
Metallurgical.....	11,140	8,203	8,472	6,986	7,464	NA	35.8	10.5	NA
Steam.....	6,772	5,202	2,127	1,037	1,003	NA	30.2	61.2	NA
Overseas Total ⁴	62,273	R 69,827	81,600	81,884	64,214	NA	-10.8	-8	NA
Metallurgical.....	45,429	R 47,124	47,690	47,091	44,743	NA	-3.6	.4	NA
Steam.....	16,844	R 22,704	33,910	34,793	19,471	NA	-25.8	-3.6	NA
Demand (thousand short tons)									
Consumption Total.....	1,038,972	1,029,229	1,005,573	962,039	951,461	889,699	25.1	8.2	1.4
Electric Utility.....	910,867	900,361	874,681	829,007	817,270	766,888	1.2	2.7	1.9
Other Industrial.....	68,120	70,599	70,941	73,055	75,179	76,134	-3.5	-2.4	-1.2
Coke.....	28,189	30,203	31,706	33,011	31,740	40,508	-6.7	-2.9	-3.9
Residential/Commercial.....	4,856	6,463	6,006	5,807	6,013	6,167	-24.9	-5.2	-2.6
Other Power Producers.....	26,941	21,603	22,239	21,158	21,260	-	24.7	6.1	-
Consumer Stocks Total.....	128,072	106,401	122,979	134,639	136,139	146,087	20.4	-1.5	-1.4
Electric Utility.....	120,501	98,826	114,623	126,304	126,897	135,860	21.9	-1.3	-1.3
All Other.....	7,571	7,576	8,355	8,334	9,243	10,227	-1	-4.9	-3.3
Coal Prices (nominal dollars per short ton)									
Mine Total.....	\$17.67	\$18.14	\$18.50	\$18.83	\$19.41	\$21.82	-2.6	-2.3	-2.3
Underground.....	25.64	25.68	25.96	26.18	26.39	28.44	-2	-7	-1.1
Surface.....	12.92	13.39	13.82	14.25	15.02	17.38	-3.5	-3.7	-3.2
Consumer									
Electric Utility.....	\$25.64	26.16	26.45	27.01	28.03	30.15	-2.0	-2.2	-1.8
Other Industrial.....	32.30	32.41	32.32	32.42	32.55	33.03	-3	-2	-2
Coke.....	46.06	47.61	47.33	47.34	46.56	47.50	-3.3	-3	-3

¹ For 1989, the Form EIA-7A solicited data on "Daily Productive Capacity." As a result, data for annual productive capacity is not available for that year.

² Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

³ Imports for 1994 through 1998 include imports to electric utilities, manufacturing plants and coke plants. Imports for 1989 include only imports to electric utilities.

⁴ Includes Mexico.

^w Withheld to avoid disclosure of individual company data.

NA Not available.

R Revised Data.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants"; Form EIA-5, "Coke Plant Report - Quarterly"; Form EIA-6A, "Coal Distribution Report"; Form EIA-7A, "Coal Production Report"; Form EIA-759, "Monthly Power Plant Report"; and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report," and for 1997 and prior years, Form EIA-867, "Annual Nonutility Power Producer Report," and for 1998, Form EIA-860B, "Annual Electric Generator Report - Nonutility."

Appendix B

Metric Tables

In response to requests from international users of U.S. coal statistics, certain summary data have been converted from the customary short tons to metric. This enables U.S. statistics to be compared with data published by countries using the metric system. The

conversion to metric tons is made by multiplying short tons by 0.907185.

The data converted to metric tons are from Tables ES3, 1, 16, 25, 35, 48, 67, 68, 76, 80, 92, 94, 96, 98, and 99.

Table B1. Trends in U.S. Coal Production, Imports, Consumption, Exports, and Stocks, 1989, 1994-1998
(Million Metric Tons)

Activity	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Production.....	1,014	989	965	937	938	890	2.5	2.0	1.5
Imports.....	8	7	7	9	8	3	16.5	-4	13.2
Producer and Distributor Stocks ¹ .	33	31	26	31	30	26	7.5	2.4	2.6
Consumption.....	918	914	892	854	844	807	.4	2.1	1.4
Exports.....	71	76	82	80	65	91	-6.6	2.3	-2.8
Consumer Stocks ¹	116	97	112	122	124	133	19.9	-1.5	-1.4

¹ Reported as of the last day of the quarter.

Note: Consumption does not include coal consumed by other power producers.

Sources: • Production: Energy Information Administration (EIA), Form EIA-7A, "Coal Production Report"; U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report"; and State Mining Agency Coal Production Reports. • Imports: U.S. Department of Commerce, Bureau of the Census, "Monthly Report IM 145." • Producer and Distributor Stocks: EIA, Form EIA-6A, "Coal Distribution Report." • Exports: U.S. Department of Commerce, Bureau of the Census, "Monthly Report EM 545." • Consumption and Consumer Stocks: EIA, Form EIA-759, "Monthly Power Plant Report"; Form EIA-3, Quarterly Coal Consumption Report - Manufacturing Plants"; Form EIA-5, "Coke Plant Report - Quarterly"; and Form EIA-6A, "Coal Distribution Report."

Table B2. Coal Production by State, 1989, 1994-1998

(Thousand Metric Tons)

Coal-Producing State and Region	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Alabama.....	20,877	22,197	22,351	22,353	21,106	25,394	-5.9	-0.3	-2.1
Alaska.....	1,220	1,315	1,343	1,540	1,422	1,436	-7.3	-3.8	-1.8
Arizona.....	10,265	10,635	9,473	10,838	11,844	10,828	-3.5	-3.5	-6
Arkansas.....	22	17	19	26	46	63	32.3	-16.8	-11.0
California.....	-	-	-	-	-	37	-	-	-
Colorado.....	26,881	24,901	22,576	23,324	22,955	15,534	7.9	4.0	6.3
Illinois.....	36,045	37,338	42,325	43,708	47,896	53,767	-3.5	-6.9	-4.3
Indiana.....	33,387	32,203	26,916	23,593	28,057	30,519	3.7	4.4	1.0
Iowa.....	-	-	-	-	42	390	-	-	-
Kansas.....	309	326	211	258	258	776	-5.3	4.6	-9.7
Kentucky Total.....	136,345	141,388	138,278	139,470	146,639	151,852	-3.6	-1.8	-1.2
Eastern.....	105,827	109,695	106,096	107,539	112,897	114,069	-3.5	-1.6	-8
Western.....	30,518	31,693	32,182	31,931	33,742	37,784	-3.7	-2.5	-2.3
Louisiana.....	2,918	3,216	2,922	3,374	3,141	2,706	-9.3	-1.8	.8
Maryland.....	3,683	3,774	3,713	3,327	3,295	3,062	-2.4	2.8	2.1
Missouri.....	337	364	644	497	761	3,064	-7.2	-18.4	-21.7
Montana.....	38,864	37,199	34,374	35,789	37,775	34,239	4.5	.7	1.4
New Mexico.....	25,943	24,517	21,834	24,324	25,438	21,502	5.8	.5	2.1
North Dakota.....	27,136	26,834	27,089	27,317	29,289	26,822	1.1	-1.9	.1
Ohio.....	25,445	26,449	25,920	23,694	27,122	30,562	-3.8	-1.6	-2.0
Oklahoma.....	1,507	1,470	1,543	1,702	1,733	1,590	2.5	-3.4	-6
Pennsylvania Total.....	73,515	69,126	61,636	55,860	56,460	64,044	6.3	6.8	1.5
Anthracite.....	4,746	4,244	4,310	4,248	4,192	3,037	11.8	3.1	5.1
Bituminous.....	68,769	64,882	57,325	51,613	52,268	61,007	6.0	7.1	1.3
Tennessee.....	2,446	2,994	3,312	2,922	2,709	5,879	-18.3	-2.5	-9.3
Texas.....	47,703	48,378	50,044	47,794	47,488	48,856	-1.4	.1	-3
Utah.....	23,655	24,206	24,954	22,831	22,135	18,237	-2.3	1.7	2.9
Virginia.....	30,615	32,511	32,286	30,934	33,683	39,014	-5.8	-2.3	-2.6
Washington.....	4,208	4,078	4,142	4,416	4,439	4,571	3.2	-1.3	-9
West Virginia Total.....	155,260	157,617	154,614	147,869	146,760	139,325	-1.5	1.4	1.2
Northern.....	40,477	38,829	41,649	41,834	44,739	50,819	4.2	-2.5	-2.5
Southern.....	114,783	118,788	112,965	106,034	102,022	88,507	-3.4	3.0	2.9
Wyoming.....	285,227	255,718	252,597	239,336	215,086	155,635	11.5	7.3	7.0
Appalachian Total¹.....	417,668	424,361	409,928	394,499	404,033	421,349	-1.6	.8	-1
Interior Total¹.....	152,746	155,005	156,805	152,884	163,164	179,514	-1.4	-1.6	-1.8
Western Total¹.....	443,398	409,404	398,381	389,715	370,382	288,840	8.3	4.6	4.9
East of Miss. River.....	517,618	525,595	511,351	493,732	513,729	543,418	-1.5	.2	-5
West of Miss. River.....	496,194	463,175	453,763	443,367	423,851	346,285	7.1	4.0	4.1
U.S. Total.....	1,013,811	988,770	965,114	937,098	937,580	889,702	2.5	2.0	1.5

¹ For a definition of coal-producing regions, see Appendix C.

Notes: Coal production excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report"; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table B3. Productive Capacity of Coal Mines by State, 1989, 1994-1998
(Thousand Metric Tons)

Coal-Producing State and Region	1998	1997	1996	1995	1994	1989 ¹	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Alabama.....	25,302	26,382	29,174	29,526	29,982	NA	-4.1	-4.1	NA
Alaska.....	w	w	w	w	w	NA	w	w	NA
Arizona.....	w	w	w	w	w	NA	w	w	NA
Arkansas.....	w	w	-	w	w	NA	w	w	NA
California.....	-	-	-	-	-	NA	-	-	NA
Colorado.....	33,256	32,174	26,608	29,425	28,191	NA	3.4	4.2	NA
Illinois.....	43,205	46,741	55,998	51,371	62,971	NA	-7.6	-9.0	NA
Indiana.....	38,274	33,565	32,263	31,984	35,318	NA	14.0	2.0	NA
Iowa.....	-	-	-	-	w	NA	-	-	NA
Kansas.....	w	w	w	w	w	NA	w	w	NA
Kentucky Total.....	169,405	177,312	171,662	184,316	193,618	NA	-4.4	-3.3	NA
Eastern.....	131,818	138,510	132,169	137,993	146,720	NA	-4.8	-2.6	NA
Western.....	37,587	38,802	39,493	46,323	46,897	NA	-3.1	-5.4	NA
Louisiana.....	w	w	w	w	w	NA	w	w	NA
Maryland.....	3,856	4,430	4,477	3,999	3,930	NA	-13.0	-5	NA
Missouri.....	772	626	949	980	1,097	NA	23.4	-8.4	NA
Montana.....	50,695	50,930	50,961	46,808	46,361	NA	-4	2.3	NA
New Mexico.....	29,747	28,670	29,660	29,719	29,762	NA	3.8	*	NA
North Dakota.....	29,469	29,545	29,197	31,265	32,586	NA	-3	-2.5	NA
Ohio.....	30,564	30,339	34,096	30,854	39,848	NA	.7	-6.4	NA
Oklahoma.....	1,797	2,223	1,797	2,320	2,042	NA	-19.2	-3.1	NA
Pennsylvania Total.....	85,739	79,404	74,102	70,023	73,460	NA	8.0	3.9	NA
Anthracite.....	6,194	4,993	4,993	5,939	5,240	NA	24.0	4.3	NA
Bituminous.....	79,545	74,411	69,109	64,083	68,220	NA	6.9	3.9	NA
Tennessee.....	3,759	3,719	3,637	3,402	3,092	NA	1.1	5.0	NA
Texas.....	49,419	49,545	54,072	49,676	50,672	NA	-3	-6	NA
Utah.....	30,697	27,470	27,424	28,021	25,075	NA	11.7	5.2	NA
Virginia.....	35,275	39,029	37,733	39,042	42,150	NA	-9.6	-4.3	NA
Washington.....	w	w	w	w	w	NA	w	w	NA
West Virginia Total.....	184,522	184,164	197,230	185,825	182,964	NA	.2	.2	NA
Northern.....	44,231	46,034	49,534	51,124	53,792	NA	-3.9	-4.8	NA
Southern.....	140,291	138,130	147,696	134,701	129,172	NA	1.6	2.1	NA
Wyoming.....	344,168	332,647	318,338	305,888	291,248	NA	3.5	4.3	NA
Appalachian Total².....	500,834	505,978	512,618	500,664	522,147	NA	-1.0	-1.0	NA
Interior Total².....	174,891	175,740	188,385	186,329	203,116	NA	-5	-3.7	NA
Western Total².....	536,392	520,850	500,757	491,489	472,817	NA	3.0	3.2	NA
East of Miss. River.....	619,901	625,085	640,372	630,341	667,333	NA	-8	-1.8	NA
West of Miss. River.....	592,217	577,483	561,387	548,141	530,746	NA	2.5	2.8	NA
U.S. Total.....	1,212,117	1,202,568	1,201,759	1,178,482	1,198,079	NA	.8	.3	NA

¹ For 1989, the Form EIA-7A solicited data on "Daily Productive Capacity." As a result, data for annual productive capacity is not available for that year.

² For a definition of coal-producing regions, see Appendix C.

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

NA Not available.

Notes: Productive capacity is the maximum amount of coal that can be produced as reported by mining companies on Form EIA-7A. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data.

Source: Energy Information Administration, Form EIA-7A, "Coal Production Report."

Table B4. Recoverable Coal Reserves at Producing Mines by State, 1989, 1994-1998

(Million Metric Tons)

Coal-Producing State and Region	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Alabama.....	339	340	410	463	415	461	-0.2	-4.9	-3.3
Alaska.....	w	w	w	w	w	w	w	w	w
Arizona.....	w	w	w	w	w	w	w	w	w
Arkansas.....	-	-	-	w	w	w	-	-	-
California.....	-	-	-	-	-	w	-	-	-
Colorado.....	490	515	582	628	614	601	-4.8	-5.5	-2.2
Illinois.....	675	675	808	800	874	1,253	-1	-6.3	-6.6
Indiana.....	284	357	350	294	276	431	-20.3	.7	-4.5
Iowa.....	-	-	-	-	w	w	-	-	-
Kansas.....	w	w	w	w	w	w	w	w	w
Kentucky Total.....	1,066	1,207	1,139	1,160	1,238	1,373	-11.7	-3.7	-2.8
Eastern.....	685	875	742	692	734	847	-21.8	-1.7	-2.3
Western.....	381	332	396	468	505	526	14.9	-6.8	-3.5
Louisiana.....	w	w	w	w	w	w	w	w	w
Maryland.....	58	61	64	52	80	79	-5.1	-7.7	-3.3
Missouri.....	3	1	2	2	11	w	187.8	-29.8	w
Montana.....	1,081	1,059	1,187	1,135	1,163	1,373	2.0	-1.8	-2.6
New Mexico.....	1,256	1,284	1,303	1,343	1,322	1,280	-2.1	-1.3	-2
North Dakota.....	1,061	1,098	1,181	1,513	1,537	1,234	-3.4	-8.8	-1.7
Ohio.....	323	289	376	425	435	739	11.8	-7.1	-8.8
Oklahoma.....	17	21	17	17	39	21	-22.8	-19.3	-2.9
Pennsylvania Total.....	703	821	722	668	828	1,074	-14.4	-4.0	-4.6
Anthracite.....	80	109	81	45	34	55	-27.0	23.4	4.3
Bituminous.....	623	712	641	623	794	1,020	-12.5	-5.9	-5.3
Tennessee.....	24	51	54	62	38	65	-52.5	-10.5	-10.3
Texas.....	718	836	797	853	931	1,030	-14.2	-6.3	-3.9
Utah.....	393	393	258	340	384	470	.1	.6	-2.0
Virginia.....	170	188	171	184	215	381	-10.1	-5.7	-8.6
Washington.....	w	w	w	w	w	w	w	w	w
West Virginia Total.....	1,731	1,576	1,570	1,571	1,660	2,099	9.8	1.0	-2.1
Northern.....	777	648	673	709	781	1,073	19.9	-1	-3.5
Southern.....	954	928	898	861	879	1,026	2.8	2.1	-8
Wyoming.....	6,550	5,865	5,980	6,100	6,350	5,704	11.7	.8	1.5
Appalachian Total¹.....	4,032	4,202	4,110	4,117	4,404	5,743	-4.0	-2.2	-3.8
Interior Total¹.....	2,203	2,351	2,501	2,572	2,784	3,544	-6.3	-5.7	-5.1
Western Total¹.....	11,284	10,833	11,014	11,550	11,878	11,287	4.2	-1.3	*
East of Miss. River.....	5,373	5,566	5,665	5,679	6,059	7,953	-3.5	-3.0	-4.3
West of Miss. River.....	12,146	11,820	11,960	12,560	13,007	12,622	2.8	-1.7	-4
U.S. Total.....	17,519	17,386	17,625	18,239	19,066	20,575	.8	-2.1	-1.8

¹ For a definition of coal-producing regions, see Appendix C.

* Data round to zero.

^w Withheld to avoid disclosure of individual company data.

Notes: Recoverable reserves represent the quantity of coal that can be recovered (i.e., mined) from existing coal reserves at reporting mines. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report"; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table B5. U.S. Coal Imports by Continent and Country of Origin, 1989, 1994-1998
(Metric Tons)

Continent and Country of Origin	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
North America Total	1,059,919	1,099,428	R 1,583,086	R 1,767,772	R 1,403,761	963,128	-3.6	-6.8	1.1
Canada	1,058,137	1,099,108	R 1,576,456	R 1,738,296	R 1,396,648	911,150	-3.7	-6.7	1.7
Mexico	1,782	320	6,630	R 7,108	R 7,113	51,978	456.9	-29.3	-31.3
Netherlands Antilles.....	-	-	-	22,368	-	-	-	-	-
South America Total	5,407,158	4,201,364	R 4,234,575	R 5,671,088	R 5,363,380	1,538,125	28.7	.2	15.0
Argentina	-	12	-	-	-	240	-100.0	-	-100.0
Colombia	3,155,356	2,827,805	R 2,745,687	R 3,819,494	R 3,743,061	1,214,321	11.6	-4.2	11.2
Venezuela	2,251,802	1,373,547	R 1,488,888	R 1,851,594	R 1,620,319	323,564	63.9	8.6	24.0
Europe Total	39,529	24,163	2,369	474	36	10,468	63.6	475.6	15.9
Belgium & Luxembourg.....	3,614	5,458	2,243	-	-	-	-33.8	-	-
Denmark	-	-	-	214	-	-	-	-	-
France	-	-	-	-	-	9	-	-	-100.0
Germany, FR	-	18	-	-	-	300	-100.0	-	-100.0
Italy.....	33	-	-	-	-	-	-	-	-
Netherlands.....	-	-	-	-	-	10,159	-	-	-100.0
Norway	-	18,491	-	-	-	-	-100.0	-	-
Poland	-	-	-	-	36	-	-	-100.0	-
Spain.....	33,051	-	90	-	-	-	-	-	-
Switzerland.....	-	182	-	-	-	-	-100.0	-	-
Turkey.....	-	-	36	-	-	-	-	-	-
United Kingdom.....	2,831	14	-	260	-	-	121.4	-	-
Asia Total	1,284,831	1,324,946	1,392,520	923,980	1,046,493	43,350	-3.0	5.3	45.7
China (Mainland)	2,329	1,820	-	48	101	43,267	28.0	119.1	-27.7
Hong Kong.....	9	-	1	-	-	37	-	-	-14.5
Indonesia.....	1,282,492	1,293,569	1,392,517	923,908	1,025,543	-	-8	5.7	-
Japan.....	1	-	2	24	1	-	-	-	-
Korea, Republic of.....	-	-	-	-	-	46	-	-	-100.0
Vietnam	-	29,557	-	-	20,848	-	-100.0	-100.0	-
Oceania & Australia Total	122,560	141,988	149,498	230,554	91,002	31,429	-13.7	7.7	16.3
Australia	84,060	104,789	149,498	192,054	83,646	31,429	-19.8	.1	11.5
New Zealand	38,500	37,199	-	38,500	7,356	-	3.5	51.3	-
Africa Total	-	-	-	-	141,931	-	-	-100.0	-
South Africa, Rep of.....	-	-	-	-	135,849	-	-	-100.0	-
Swaziland	-	-	-	-	6,082	-	-	-100.0	-
Total	7,913,997	6,791,889	R 7,362,048	R 8,593,868	R 8,046,603	2,586,500	16.5	-4	13.2

^R Revised Data.

Note: Coal imports include coal to Puerto Rico and the Virgin Islands.

Source: U.S. Department of Commerce, Bureau of the Census, "Monthly Report IM 145."

Table B6. Coal Mining Productivity by State, 1989, 1994-1998
(Metric Tons of Coal Produced per Miner per Hour)

Coal-Producing State and Region	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Alabama.....	2.11	2.17	2.00	2.03	2.04	2.04	-2.5	0.8	0.4
Alaska.....	4.95	5.82	6.18	6.77	6.30	7.02	-15.0	-5.8	-3.8
Arizona.....	5.83	6.16	5.72	5.75	6.08	5.67	-5.3	-1.0	.3
Arkansas.....	1.77	1.76	-	1.33	1.38	1.59	.3	6.4	1.2
California.....	-	-	-	-	-	7.45	-	-	-
Colorado.....	7.68	6.97	6.64	5.57	5.62	3.70	10.2	8.1	8.4
Illinois.....	3.84	3.81	3.79	3.51	3.26	2.52	.8	4.2	4.8
Indiana.....	4.82	4.84	4.52	4.24	3.88	3.50	-4	5.5	3.6
Iowa.....	-	-	-	-	1.38	1.37	-	-	-
Kansas.....	6.79	3.46	1.97	2.01	1.75	2.42	96.1	40.3	12.2
Kentucky Total.....	3.38	3.58	3.45	3.24	2.95	2.52	-5.5	3.5	3.3
Eastern.....	3.30	3.48	3.34	3.14	2.94	2.34	-5.0	2.9	3.9
Western.....	3.68	3.97	3.89	3.60	2.97	3.29	-7.3	5.4	1.3
Louisiana.....	8.70	9.93	9.86	12.02	11.79	13.64	-12.4	-7.3	-4.9
Maryland.....	3.60	3.56	3.74	3.46	3.34	2.72	1.0	1.9	3.1
Missouri.....	2.25	2.89	3.16	2.31	3.26	3.11	-22.1	-8.8	-3.5
Montana.....	23.68	21.37	19.85	19.10	19.89	17.18	10.8	4.5	3.6
New Mexico.....	7.87	8.50	7.66	6.27	6.14	7.19	-7.4	6.4	1.0
North Dakota.....	15.75	16.17	15.61	15.24	17.09	14.23	-2.6	-2.0	1.1
Ohio.....	3.30	3.65	3.59	3.29	3.10	2.11	-9.6	1.5	5.1
Oklahoma.....	3.05	2.28	2.37	2.69	2.43	1.95	33.9	5.8	5.1
Pennsylvania Total.....	3.37	3.29	3.05	2.93	2.71	2.07	2.3	5.6	5.5
Anthracite.....	1.59	1.60	1.74	1.89	1.75	1.02	-6	-2.4	5.0
Bituminous.....	3.64	3.53	3.23	3.06	2.82	2.17	3.2	6.6	5.9
Tennessee.....	2.36	2.15	1.99	2.14	2.03	1.56	9.9	3.9	4.8
Texas.....	9.19	9.29	9.19	8.25	8.00	6.63	-1.1	3.5	3.7
Utah.....	5.83	5.75	6.56	6.37	5.98	4.31	1.4	-6	3.4
Virginia.....	2.50	2.51	2.46	2.27	2.28	2.00	-5	2.4	2.5
Washington.....	4.27	3.26	3.60	3.67	3.73	3.03	31.1	3.4	3.9
West Virginia Total.....	4.09	4.05	3.55	3.40	3.35	2.52	1.0	5.1	5.5
Northern.....	4.26	4.06	3.68	3.38	3.29	2.41	4.9	6.7	6.6
Southern.....	4.03	4.04	3.50	3.40	3.37	2.59	-3	4.5	5.0
Wyoming.....	35.52	31.34	29.08	27.27	23.63	18.39	13.3	10.7	7.6
Appalachian Total¹.....	3.37	3.41	3.16	3.01	2.90	2.26	-1.1	3.9	4.5
Interior Total¹.....	4.95	5.02	4.89	4.51	4.02	3.48	-1.4	5.4	4.0
Western Total¹.....	17.57	16.10	15.79	14.22	13.23	10.55	9.1	7.3	5.8
East of Miss. River.....	3.49	3.53	3.30	3.13	2.98	2.39	-1.2	4.0	4.3
West of Miss. River.....	15.78	14.55	14.21	12.87	11.99	9.27	8.4	7.1	6.1
U.S. Total.....	5.64	5.48	5.16	4.88	4.51	3.36	3.0	5.7	5.9

¹ For a definition of coal-producing regions, see Appendix C.

Notes: Productivity is calculated by dividing total coal production by the total direct labor hours worked by all mine employees. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report"; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table B7. Coal Consumption by Census Division and State, 1989, 1994-1998
(Thousand Metric Tons)

Census Division and State	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
New England	4,996	7,131	6,372	6,043	5,945	6,369	-29.9	-4.3	-2.7
Connecticut.....	541	966	845	822	782	807	-44.0	-8.8	-4.3
Maine.....	128	176	212	256	421	246	-27.0	-25.7	-7.0
Massachusetts.....	2,893	4,437	4,062	3,732	3,567	4,210	-34.8	-5.1	-4.1
New Hampshire.....	1,333	1,547	1,249	1,229	1,167	1,073	-13.8	3.4	2.4
Rhode Island.....	2	3	3	2	3	25	-25.5	-10.1	-24.6
Vermont.....	99	2	2	3	4	8	NM	117.9	32.7
Middle Atlantic	62,858	66,385	64,379	62,108	61,268	69,106	-5.3	.6	-1.0
New Jersey.....	2,152	2,601	2,179	1,881	1,786	3,216	-17.3	4.8	-4.4
New York.....	11,230	10,632	10,284	10,036	10,409	12,796	5.6	1.9	-1.4
Pennsylvania.....	49,476	53,153	51,915	50,191	49,073	53,094	-6.9	.2	-8
East North Central	212,343	212,259	207,746	197,496	193,401	186,505	*	2.4	1.4
Illinois.....	40,487	43,201	40,307	35,946	35,450	29,370	-6.3	3.4	3.6
Indiana.....	60,143	59,912	58,079	56,818	54,427	52,062	.4	2.5	1.6
Michigan.....	34,549	32,557	33,288	32,479	32,363	31,647	6.1	1.6	1.0
Ohio.....	54,738	53,463	54,282	51,328	51,447	55,353	2.4	1.6	-1
Wisconsin.....	22,426	23,125	21,790	20,925	19,714	18,073	-3.0	3.3	2.4
West North Central	131,026	125,333	123,961	118,867	113,935	103,641	4.5	3.5	2.6
Iowa.....	21,183	19,704	19,206	18,721	17,546	15,536	7.5	4.8	3.5
Kansas.....	16,090	16,033	17,313	14,987	15,566	13,574	.3	.8	1.9
Minnesota.....	17,768	17,315	17,476	17,189	16,991	16,583	2.6	1.1	.8
Missouri.....	35,007	33,262	31,191	28,806	25,096	23,902	5.2	8.7	4.3
Nebraska.....	10,698	10,170	9,415	9,431	8,437	6,883	5.2	6.1	5.0
North Dakota.....	28,178	26,635	27,679	27,431	27,545	24,858	5.8	.6	1.4
South Dakota.....	2,101	2,215	1,680	2,302	2,754	2,305	-5.1	-6.5	-1.0
South Atlantic	157,083	154,853	150,180	140,849	137,833	138,807	1.4	3.3	1.4
Delaware.....	1,609	1,692	1,775	1,825	2,020	2,138	-4.9	-5.5	-3.1
District of Columbia.....	6	36	21	5	43	54	-84.7	-39.8	-22.4
Florida.....	26,151	26,054	25,803	24,064	23,661	23,085	.4	2.5	1.4
Georgia.....	29,666	29,659	28,266	28,384	26,539	25,327	*	2.8	1.8
Maryland.....	10,694	10,216	10,311	10,159	9,518	10,470	4.7	2.9	.2
North Carolina.....	26,233	26,860	25,060	21,849	21,121	20,175	-2.3	5.6	3.0
South Carolina.....	13,289	12,801	12,566	11,139	11,787	10,869	3.8	3.0	2.3
Virginia.....	14,373	13,858	13,592	12,136	11,605	12,954	3.7	5.5	1.2
West Virginia.....	35,062	33,677	32,785	31,288	31,540	33,735	4.1	2.7	.4
East South Central	98,328	102,636	100,199	96,008	90,074	79,520	-4.2	2.2	2.4
Alabama.....	33,065	33,052	33,613	31,124	28,552	24,981	*	3.7	3.2
Kentucky.....	35,593	38,309	37,070	35,849	34,555	29,748	-7.1	.7	2.0
Mississippi.....	5,350	5,691	5,254	4,178	3,887	3,475	-6.0	8.3	4.9
Tennessee.....	24,320	25,585	24,262	24,856	23,079	21,315	-4.9	1.3	1.5
West South Central	133,782	136,394	132,877	126,195	125,419	118,018	-1.9	1.6	1.4
Arkansas.....	13,212	12,763	13,441	12,284	11,427	10,476	3.5	3.7	2.6
Louisiana.....	12,601	12,586	11,371	12,118	12,791	11,314	.1	-4	1.2
Oklahoma.....	17,768	19,149	18,257	17,777	16,080	13,686	-7.2	2.5	2.9
Texas.....	90,202	91,895	89,809	84,017	85,121	82,543	-1.8	1.5	1.0
Mountain	106,817	101,051	97,274	97,906	104,957	96,354	5.7	.4	1.1
Arizona.....	17,249	16,515	15,234	15,134	17,763	15,305	4.4	-7	1.3
Colorado.....	16,359	16,293	15,623	15,395	15,853	14,872	.4	.8	1.1
Idaho.....	434	327	360	421	484	484	32.8	-2.7	-1.2
Montana.....	9,729	8,634	7,286	9,076	10,060	9,487	12.7	-8	.3
Nevada.....	7,412	6,750	6,898	6,659	7,229	6,955	9.8	.6	.7
New Mexico.....	14,482	14,412	13,877	13,809	13,947	13,875	.5	.9	.5
Utah.....	15,059	14,445	13,823	13,886	14,711	13,648	4.2	.6	1.1
Wyoming.....	26,093	23,674	24,173	23,526	24,910	21,729	10.2	1.2	2.0
Pacific	10,867	8,060	9,079	8,081	11,034	8,274	34.8	-4	3.1
Alaska.....	629	671	640	740	722	271	-6.3	-3.4	9.8
California.....	2,543	1,936	2,102	2,375	2,266	2,314	31.3	2.9	1.0
Hawaii.....	152	132	154	174	78	29	15.2	18.2	20.1
Oregon.....	1,882	832	1,029	1,020	2,249	359	126.1	-4.4	20.2
Washington.....	5,662	4,489	5,155	3,772	5,718	5,300	26.1	-2	.7
Other Power Producers	24,440	19,598	20,175	19,195	19,286	-	24.7	6.1	-
U.S. Total	942,540	933,701	912,241	872,747	863,151	807,121	0.9	2.2	1.7

* Data round to zero.

NM Not meaningful as value is greater than 500 percent.

Note: Totals may not equal sum of components due to independent rounding. Regional totals for 1989 may not sum to the U.S. total due to distribution to unknown State.

Sources: Energy Information Administration, Form EIA-759, "Monthly Power Plant Report"; Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants"; Form EIA-5, "Coke Plant Report - Quarterly"; and Form EIA-6A, "Coal Distribution Report"; and for 1997 and prior years, Form EIA-867, "Annual Nonutility Power Producer Report", and for 1998 Form EIA-860B, "Annual Electric Generator Report - Nonutility."

Table B8. Year-End Consumer Coal Stocks by Census Division and State, 1989, 1994-1998
(Thousand Metric Tons)

Census Division and State	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
New England Total	w	740	1,176	879	1,013	987	w	w	w
Connecticut.....	w	w	w	w	w	w	w	w	w
Maine.....	w	w	w	w	w	w	w	w	w
Massachusetts.....	w	w	w	w	w	w	w	w	w
New Hampshire.....	w	w	w	w	w	w	w	w	w
Rhode Island.....	-	-	-	-	-	25	-	-	-
Vermont.....	-	-	-	-	-	*	-	-	-
Middle Atlantic Total	w	w	w	w	w	w	w	w	w
New Jersey.....	w	w	w	w	w	w	w	w	w
New York.....	w	w	w	w	w	w	w	w	w
Pennsylvania.....	8,217	7,855	8,035	9,346	10,940	10,768	4.6	-6.9	-2.9
East North Central Total	33,392	27,936	27,955	30,679	32,507	35,310	19.5	.7	-6
Illinois.....	w	w	w	w	w	w	w	w	w
Indiana.....	8,154	6,026	7,217	8,435	10,620	8,526	35.3	-6.4	-5
Michigan.....	w	w	w	w	w	w	w	w	w
Ohio.....	5,602	5,737	4,924	5,385	7,090	6,400	-2.3	-5.7	-1.5
Wisconsin.....	4,508	4,016	4,045	3,317	3,118	3,790	12.2	9.6	1.9
West North Central Total	17,263	13,456	16,626	16,976	16,072	18,451	28.3	1.8	-7
Iowa.....	3,865	2,671	4,184	4,034	3,790	4,151	44.7	.5	-8
Kansas.....	2,891	2,085	2,707	3,501	2,380	2,980	38.7	5.0	-3
Minnesota.....	2,172	1,809	1,577	1,800	2,026	1,944	20.0	1.7	1.2
Missouri.....	4,680	3,494	4,824	4,335	4,145	4,041	33.9	3.1	1.6
Nebraska.....	w	w	w	w	w	w	w	w	w
North Dakota.....	w	w	w	w	w	w	w	w	w
South Dakota.....	w	w	w	w	w	w	w	w	w
South Atlantic Total	w	w	w	w	w	w	w	w	w
Delaware.....	w	w	w	w	w	w	w	w	w
Florida.....	4,218	3,182	3,119	2,965	3,550	4,074	32.5	4.4	.4
Georgia.....	3,235	2,184	3,491	3,435	4,394	4,700	48.1	-7.4	-4.1
Maryland.....	w	w	w	w	w	w	w	w	w
North Carolina.....	3,402	1,836	2,423	2,590	3,917	2,718	85.3	-3.5	2.5
South Carolina.....	2,488	1,833	1,975	1,990	2,298	1,963	35.7	2.0	2.7
Virginia.....	w	w	w	w	w	w	w	w	w
West Virginia.....	w	w	w	w	w	w	w	w	w
East South Central Total	w	w	w	w	w	w	w	w	w
Alabama.....	3,245	2,696	2,593	3,310	3,748	3,800	20.4	-3.5	-1.7
Kentucky.....	w	w	w	w	w	w	w	w	w
Mississippi.....	w	w	w	w	w	w	w	w	w
Tennessee.....	2,129	1,657	1,361	1,709	1,601	2,821	28.5	7.4	-3.1
West South Central Total	13,381	10,291	18,040	18,656	14,478	16,033	30.0	-1.9	-2.0
Arkansas.....	1,020	865	2,467	2,558	1,612	1,952	17.8	-10.8	-7.0
Louisiana.....	1,979	1,141	2,250	2,422	1,744	2,496	73.4	3.2	-2.5
Oklahoma.....	3,119	2,352	3,819	3,852	2,238	2,635	32.6	8.6	1.9
Texas.....	7,263	5,933	9,504	9,824	8,884	8,951	22.4	-4.9	-2.3
Mountain Total	w	w	w	w	w	w	w	w	w
Arizona.....	1,746	1,283	1,836	2,751	2,941	3,095	36.1	-12.2	-6.1
Colorado.....	2,597	2,246	2,771	3,340	2,853	3,602	15.6	-2.3	-3.6
Idaho.....	114	96	70	107	71	112	19.6	12.7	.3
Montana.....	w	w	w	w	w	w	w	w	w
Nevada.....	w	w	w	w	w	w	w	w	w
New Mexico.....	w	w	w	w	w	w	w	w	w
Utah.....	w	w	w	w	w	w	w	w	w
Wyoming.....	1,198	1,411	2,057	2,664	2,316	3,094	-15.1	-15.2	-10.0
Pacific Total	1,180	1,055	1,156	2,346	796	1,569	11.8	10.4	-3.1
Alaska.....	-	*	1	1	2	2	-	-	-
California.....	171	107	136	121	114	145	59.3	10.6	1.8
Hawaii.....	w	w	w	w	w	w	w	w	w
Oregon.....	w	w	w	w	w	w	w	w	w
Washington.....	w	800	777	1,786	516	956	-8	11.4	-2.0
U.S. Total	116,185	96,526	111,564	122,142	123,504	132,528	20.4	-1.5	-1.4

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

Notes: Totals may not equal sum of components due to independent rounding. Stocks for Residential and Commercial Sector are not included.

Sources: Energy Information Administration, Form EIA-759, "Monthly Power Plant Report"; Form EIA-5, "Coke Plant Report - Quarterly"; and Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants."

Table B9. U.S. Coal Exports by Destination, 1989, 1994-1998
(Thousand Metric Tons)

Continent and Country of Destination	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
North America Total	20,245	15,374	12,346	9,444	8,623	15,370	31.7	23.8	3.1
Canada ¹	18,737	13,586	10,912	8,552	8,340	15,220	37.9	22.4	2.3
Mexico.....	1,399	1,722	1,369	790	218	57	-18.7	59.1	42.6
Other ²	108	66	66	102	65	93	64.5	13.8	1.7
South America Total	6,381	7,452	6,808	6,321	5,394	6,699	-14.4	4.3	-5
Argentina.....	294	295	276	310	411	673	-4	-8.0	-8.8
Brazil.....	5,874	6,763	5,933	5,761	4,973	5,153	-13.1	4.3	1.5
Chile.....	46	132	521	206	*	855	-65.1	382.6	-27.7
Venezuela.....	82	181	41	20	11	17	-54.9	66.6	19.4
Other ²	86	81	38	24	*	1	6.4	317.6	63.0
Europe Total	30,638	37,495	42,813	44,107	32,500	46,815	-18.3	-1.5	-4.6
Belgium & Luxembourg.....	2,898	3,918	4,145	4,084	4,455	6,436	-26.0	-10.2	-8.5
Bulgaria.....	898	1,011	1,258	1,214	1,123	87	-11.2	-5.4	29.5
Denmark.....	249	318	1,194	1,905	432	2,883	-21.6	-12.9	-23.8
Finland.....	420	600	638	1,187	342	94	-30.0	5.3	18.1
France.....	2,895	3,083	3,495	3,319	2,608	5,912	-6.1	2.6	-7.6
Germany, FR.....	1,131	789	957	1,772	293	675	43.3	40.1	5.9
Iceland.....	35	49	56	36	7	58	-27.3	52.6	-5.4
Ireland.....	1,043	578	694	829	883	1,132	80.5	4.2	-9
Italy.....	4,824	6,368	8,350	8,222	6,843	10,196	-24.2	-8.4	-8.0
Netherlands.....	4,097	4,377	6,403	6,624	4,421	5,512	-6.4	-1.9	-3.2
Norway.....	85	87	77	109	79	128	-3.3	1.8	-4.5
Portugal.....	677	1,334	1,635	1,590	958	1,292	-49.3	-8.3	-6.9
Romania.....	995	2,035	1,372	1,800	1,409	1,417	-51.1	-8.3	-3.8
Spain.....	2,863	3,750	3,713	4,221	3,748	3,030	-23.6	-6.5	-6
Sweden.....	686	756	970	1,014	636	666	-9.2	1.9	.3
Turkey.....	1,444	1,898	1,966	1,825	1,211	1,530	-23.9	4.5	-6
United Kingdom.....	5,395	6,518	5,621	4,288	3,051	4,094	-17.2	15.3	3.1
Other ²	2	26	268	71	*	1,672	-91.2	62.9	-51.9
Asia Total	11,168	13,152	16,311	17,323	16,290	20,624	-15.1	-9.0	-6.6
China (Mainland).....	1	^R 115	-	*	-	-	-99.5	-	-
China (Taiwan).....	1,378	2,033	2,215	2,298	3,061	4,080	-32.2	-18.1	-11.3
Israel.....	478	538	1,090	690	784	442	-11.1	-11.6	.9
Japan.....	7,017	7,234	9,551	10,693	9,215	12,561	-3.0	-6.6	-6.3
Korea, Republic of.....	2,225	3,165	3,423	3,640	3,228	3,480	-29.7	-8.9	-4.8
Other ²	70	^R 68	32	2	3	62	3.2	119.6	1.4
Oceania & Australia Total	4	1	1	*	*	*	486.8	72.3	29.0
Other ²	4	1	1	*	*	*	486.8	72.3	29.0
Africa Total	2,366	2,317	3,796	3,133	1,927	1,949	2.1	5.3	2.2
Algeria.....	311	240	160	200	322	671	29.9	-8	-8.2
Egypt.....	808	1,025	941	1,120	951	531	-21.2	-4.0	4.8
Morocco.....	62	129	1,497	1,099	76	747	-52.0	-5.0	-24.2
South Africa, Rep of.....	1,178	895	1,197	713	578	-	31.6	19.5	-
Other ²	7	28	-	-	-	*	-75.3	-	55.9
Total	70,804	75,791	82,075	80,329	64,735	91,458	-6.6	2.3	-2.8

¹ Based on the U.S. - Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

² Includes countries with exports less than or equal to 50,000 short tons (45,359 metric tons) in 1997.

* Data round to zero.

^R Revised data.

Note: Total may not equal sum of components due to independent rounding.

Source: U.S. Department of Commerce, Bureau of the Census, "Monthly Report EM 545."

Table B10. Average Mine Price of Coal by State, 1989, 1994-1998
(Nominal Dollars per Metric Ton)

Coal-Producing State and Region	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Alabama.....	\$41.04	\$42.41	\$43.52	\$42.38	\$44.22	\$45.40	-3.2	-1.8	-1.1
Alaska.....	w	w	w	w	w	w	w	w	w
Arizona.....	w	w	w	w	w	w	w	w	w
Arkansas.....	w	w	-	w	w	w	w	w	w
California.....	-	-	-	-	-	w	-	-	-
Colorado.....	\$19.07	\$20.35	\$19.77	\$21.23	\$21.78	\$26.06	-6.3	-3.3	-3.4
Illinois.....	25.20	23.63	25.07	25.41	25.50	31.05	6.6	-3	-2.3
Indiana.....	21.69	21.62	22.31	23.93	24.56	25.96	.3	-3.0	-2.0
Iowa.....	-	-	-	-	w	w	-	-	-
Kansas.....	w	w	w	w	w	w	w	w	w
Kentucky Total.....	\$26.25	\$26.14	\$26.36	\$27.33	\$27.42	\$27.52	.4	-1.1	-5
Eastern.....	27.10	27.17	27.54	28.66	27.83	28.44	-.3	-.7	-5
Western.....	23.16	22.59	22.47	22.88	26.05	24.78	2.5	-2.9	-8
Louisiana.....	w	w	w	w	w	w	w	w	w
Maryland.....	\$26.84	\$25.63	\$26.90	\$27.22	\$29.04	\$27.26	4.7	-1.9	-2
Missouri.....	22.91	18.60	25.70	20.84	w	w	23.2	w	w
Montana.....	9.10	10.85	10.98	10.61	\$11.46	\$11.33	-16.1	-5.6	-2.4
New Mexico.....	22.79	24.06	27.18	26.24	25.68	25.81	-5.3	-2.9	-1.4
North Dakota.....	8.83	8.89	8.83	8.81	8.40	8.11	-.6	1.3	.9
Ohio.....	30.37	26.08	27.39	28.62	32.11	33.61	16.5	-1.4	-1.1
Oklahoma.....	28.68	29.02	29.25	26.60	28.18	31.37	-1.2	.4	-1.0
Pennsylvania Total.....	28.52	28.64	28.42	29.52	28.86	32.33	-.4	-.3	-1.4
Anthracite.....	47.30	38.71	40.54	43.85	39.76	47.32	22.2	4.4	*
Bituminous.....	27.28	28.01	27.54	28.41	28.05	31.68	-2.6	-.7	-1.6
Tennessee.....	31.63	29.80	30.63	29.70	29.95	29.74	6.1	1.4	.7
Texas.....	13.74	13.40	13.41	13.41	13.65	12.02	2.6	.2	1.5
Utah.....	20.35	19.41	23.85	21.06	21.24	23.66	4.9	-1.1	-1.6
Virginia.....	31.62	31.13	31.36	31.38	29.59	30.46	1.6	1.7	.4
Washington.....	w	w	w	w	w	w	w	w	w
West Virginia Total.....	\$29.84	\$29.37	\$29.30	\$29.96	\$30.23	\$31.62	1.6	-.3	-.6
Northern.....	28.24	28.51	27.41	27.46	29.51	30.97	-.9	-1.1	-1.0
Southern.....	30.39	29.65	30.00	30.94	30.54	32.00	2.5	-.1	-.6
Wyoming.....	5.97	6.62	7.06	7.25	7.53	9.51	-9.8	-5.6	-5.0
Appalachian Total¹.....	29.60	29.26	29.52	30.25	30.16	31.68	1.1	-.5	-.8
Interior Total¹.....	20.34	19.75	20.29	20.73	21.90	23.49	3.0	-1.8	-1.6
Western Total¹.....	9.66	10.50	11.06	11.19	11.65	13.36	-8.0	-4.6	-3.5
East of Miss. River.....	28.42	27.99	28.33	29.04	29.15	30.81	1.5	-.6	-.9
West of Miss. River.....	10.19	10.93	11.46	11.56	12.03	13.51	-6.8	-4.0	-3.1
U.S. Total.....	19.48	19.99	20.39	20.76	21.40	24.06	-2.6	-2.3	-2.3

¹ For a definition of coal-producing regions, see Appendix C.

* Data round to zero.

^w Withheld to avoid disclosure of individual company data.

Notes: For 1997 and prior years, average mine price is calculated by dividing the total free on board (f.o.b.) mine value of the coal produced by the total production. For 1998, average mine price is calculated by dividing the total free on board (f.o.b.) rail/barge value of the coal sold by the total coal sold. A measure of dispersion of the 1998 average prices at the State level (interquartile range) is given in Appendix D, Table D1. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide data.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report"; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table B11. Average Price of Coal Delivered to Electric Utilities by Census Division and State, 1989, 1994-1998
(Nominal Dollars per Metric Ton)

Census Division and State	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
New England Total	\$47.33	\$48.14	\$48.01	\$47.78	\$47.19	\$49.10	-1.7	0.1	-0.4
Connecticut	52.46	55.14	55.17	54.37	51.20	62.70	-4.9	.6	-2.0
Massachusetts	46.63	47.09	47.00	47.00	47.40	45.95	-1.0	-4	.2
New Hampshire	46.68	46.98	46.55	45.93	43.72	50.91	-6	1.6	-9
Middle Atlantic Total	37.84	37.91	38.67	38.17	40.04	40.82	-2	-1.4	-8
New Jersey.....	45.98	50.65	50.18	52.00	53.45	51.63	-9.2	-3.7	-1.3
New York.....	41.27	41.14	40.95	40.63	41.49	44.45	.3	-1	-8
Pennsylvania.....	36.69	36.69	37.55	36.91	39.01	39.14	*	-1.5	-7
East North Central Total	30.33	30.52	31.18	32.70	33.69	37.59	-6	-2.6	-2.3
Illinois	33.31	33.52	35.43	35.91	36.04	42.74	-6	-1.9	-2.7
Indiana	26.04	26.84	27.20	28.59	29.54	32.05	-3.0	-3.1	-2.3
Michigan	31.07	31.89	32.34	34.12	36.26	42.80	-2.6	-3.8	-3.5
Ohio	35.84	34.62	35.61	37.96	38.25	38.81	3.5	-1.6	-9
Wisconsin.....	22.01	22.52	21.55	23.40	25.50	30.98	-2.2	-3.6	-3.7
West North Central Total	16.44	16.96	17.12	17.75	18.47	21.88	-3.1	-2.9	-3.1
Iowa	16.67	17.89	17.96	18.88	19.17	24.00	-6.8	-3.4	-4.0
Kansas	18.81	19.74	19.30	19.66	19.68	24.25	-4.7	-1.1	-2.8
Minnesota.....	20.94	21.47	20.94	22.18	22.14	23.15	-2.4	-1.4	-1.1
Missouri	18.07	18.52	19.08	20.00	23.58	30.87	-2.4	-6.4	-5.8
Nebraska	11.10	11.09	13.64	14.18	14.45	15.79	.1	-6.4	-3.8
North Dakota	11.03	11.25	10.71	10.64	10.23	10.06	-2.0	1.9	1.0
South Dakota	17.84	17.62	18.67	15.82	14.44	16.79	1.2	5.4	.7
South Atlantic Total	39.22	40.05	40.43	42.17	43.57	45.41	-2.1	-2.6	-1.6
Delaware	44.66	45.25	45.76	46.60	46.28	51.16	-1.3	-9	-1.5
Florida.....	44.12	46.10	46.74	48.42	48.18	48.79	-4.3	-2.2	-1.1
Georgia.....	40.03	41.09	40.28	42.57	43.89	47.35	-2.6	-2.3	-1.8
Maryland.....	41.48	42.71	42.43	42.99	43.92	45.11	-2.9	-1.4	-9
North Carolina.....	39.31	38.97	40.65	44.72	46.04	48.89	.9	-3.9	-2.4
South Carolina.....	40.84	41.02	41.38	42.83	43.92	47.49	-4	-1.8	-1.7
Virginia.....	38.29	38.56	39.38	40.68	40.84	43.31	-7	-1.6	-1.4
West Virginia.....	33.14	33.82	34.09	34.84	38.25	38.95	-2.0	-3.5	-1.8
East South Central Total	32.07	31.64	32.35	33.16	35.75	37.18	1.4	-2.7	-1.6
Alabama	39.99	39.22	40.11	40.78	44.55	49.42	1.9	-2.7	-2.3
Kentucky.....	27.03	26.68	26.93	28.34	29.94	28.81	1.3	-2.5	-7
Mississippi	35.84	35.76	36.71	37.92	39.18	46.62	.2	-2.2	-2.9
Tennessee.....	29.10	29.40	30.46	30.80	33.75	35.21	-1.0	-3.6	-2.1
West South Central Total	21.31	21.70	22.19	22.78	22.91	25.01	-1.8	-1.8	-1.8
Arkansas.....	28.14	31.48	28.83	30.85	30.76	31.36	-10.6	-2.2	-1.2
Louisiana.....	25.51	26.42	27.27	27.70	27.61	29.37	-3.4	-1.9	-1.5
Oklahoma.....	17.35	17.50	18.51	18.74	19.29	26.48	-8	-2.6	-4.6
Texas.....	20.51	20.61	21.24	21.66	21.86	23.28	-5	-1.6	-1.4
Mountain Total	22.96	23.72	24.05	23.71	24.07	24.04	-3.2	-1.2	-5
Arizona.....	29.89	31.91	32.57	31.59	31.15	31.76	-6.3	-1.0	-7
Colorado.....	21.39	21.97	22.31	22.85	23.16	23.10	-2.6	-2.0	-8
Montana	12.53	12.69	13.12	12.64	12.99	10.81	-1.3	-9	1.6
Nevada.....	32.05	34.28	33.55	31.99	35.68	37.26	-6.5	-2.6	-1.7
New Mexico	26.15	26.71	28.71	28.21	28.08	24.92	-2.1	-1.8	.5
Utah.....	28.63	27.80	27.18	27.85	28.77	30.92	3.0	-1	-8
Wyoming	15.25	15.61	15.76	15.75	15.53	16.38	-2.3	-4	-8
Pacific Total	25.43	27.77	26.42	25.16	24.18	28.00	-8.4	1.3	-1.1
Oregon	20.85	21.99	20.73	20.72	21.14	-	-5.2	-3	-
Washington.....	26.94	28.82	27.46	26.17	25.27	28.00	-6.5	1.6	-4
U.S. Total	28.26	28.83	29.16	29.77	30.89	33.23	-2.0	-2.2	-1.8

* Data round to zero.

Note: Average prices are based on the cost including insurance and freight.

Source: Federal Energy Regulatory Commission, FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

Table B12. Average Price of Coal Delivered to Other Industrial Plants by Census Division and State, 1989, 1994-1998
(Nominal Dollars per Metric Ton)

Census Division and State	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
New England Total	w	\$69.95	\$63.22	\$62.72	\$61.44	\$71.41	w	w	w
Maine.....	w	w	w	w	w	w	w	w	w
Massachusetts.....	w	w	w	w	w	w	w	w	w
New Hampshire.....	-	-	-	-	-	w	-	-	-
Vermont.....	-	-	-	-	-	w	-	-	-
Middle Atlantic Total	\$40.27	w	w	w	w	w	w	w	w
New Jersey.....	w	w	w	w	w	w	w	w	w
New York.....	\$46.24	\$45.77	\$44.21	\$46.19	\$46.52	\$48.30	1.0	-0.1	-0.5
Pennsylvania.....	37.84	37.69	37.30	37.56	37.10	39.61	.4	.5	-5
East North Central Total	36.62	36.96	37.96	38.45	38.27	38.95	-9	-1.1	-7
Illinois.....	32.47	32.80	32.72	32.00	32.11	34.36	-1.0	.3	-6
Indiana.....	33.30	32.80	35.01	36.53	34.56	36.24	1.5	-9	-9
Michigan.....	44.54	46.23	45.50	45.39	45.42	45.70	-3.6	-5	-3
Ohio.....	36.94	37.53	38.89	38.78	39.40	37.24	-1.5	-1.6	-1
Wisconsin.....	44.55	44.12	44.12	44.32	45.45	46.49	1.0	-5	-5
West North Central Total	20.64	20.97	21.00	20.86	20.52	19.87	-1.6	.1	.4
Iowa.....	31.08	31.88	32.32	32.23	31.44	34.02	-2.5	-3	-1.0
Kansas.....	34.26	35.20	35.78	35.74	35.55	31.32	-2.6	-9	1.0
Minnesota.....	32.74	34.21	31.80	37.92	39.31	40.25	-4.3	-4.5	-2.3
Missouri.....	33.60	33.14	34.58	36.17	36.24	32.59	1.4	-1.9	.3
Nebraska.....	w	w	w	w	w	w	w	w	w
North Dakota.....	w	w	w	w	w	w	w	w	w
South Dakota.....	\$26.45	\$25.74	\$27.45	\$24.48	\$24.01	\$17.30	2.7	2.4	4.8
South Atlantic Total	w	w	w	w	w	w	w	w	w
Delaware.....	w	w	w	w	w	w	w	w	w
Florida.....	\$49.18	\$49.75	\$50.36	\$51.41	\$51.37	\$50.76	-1.1	-1.1	-3
Georgia.....	49.10	49.42	48.73	49.21	50.39	47.37	-6	-6	.4
Maryland.....	35.72	35.95	35.85	34.90	35.47	34.85	-6	.2	.3
North Carolina.....	47.09	47.55	47.80	47.72	48.08	46.99	-1.0	-5	*
South Carolina.....	48.53	48.75	48.59	47.58	48.32	46.49	-4	.1	.5
Virginia.....	48.07	48.33	47.96	46.85	45.82	42.90	-5	1.2	1.3
West Virginia.....	53.18	38.92	36.78	37.05	36.07	34.00	36.6	10.2	5.1
East South Central Total	w	w	w	w	w	w	w	w	w
Alabama.....	\$43.53	\$44.31	\$44.26	\$43.58	\$42.70	\$44.49	-1.8	.5	-2
Kentucky.....	48.13	49.28	48.52	48.60	47.64	49.90	-2.3	.3	-4
Mississippi.....	w	w	w	w	w	w	w	w	w
Tennessee.....	\$40.37	\$40.05	\$38.82	\$39.33	\$38.96	\$38.11	.8	.9	.6
West South Central Total	25.26	24.71	24.02	24.29	25.29	25.40	2.2	*	-1
Arkansas.....	45.83	46.71	47.67	47.97	48.81	48.85	-1.9	-1.6	-7
Louisiana.....	w	w	w	w	w	w	w	w	w
Oklahoma.....	w	w	w	w	w	w	w	w	w
Texas.....	\$23.20	\$22.19	\$20.93	\$20.68	\$21.54	\$20.34	4.6	1.9	1.5
Mountain Total	30.09	29.91	29.44	29.83	31.73	31.67	.6	-1.3	-6
Arizona.....	42.63	42.78	43.29	44.60	45.58	43.85	-3	-1.6	-3
Colorado.....	26.18	27.70	25.54	28.78	31.92	30.65	-5.5	-4.8	-1.7
Idaho.....	37.82	w	w	w	w	w	w	w	w
Montana.....	w	w	w	w	w	w	w	w	w
Nevada.....	w	w	w	w	w	w	w	w	w
New Mexico.....	w	w	w	w	w	w	w	w	w
Utah.....	\$21.00	\$21.25	\$21.06	\$21.76	\$29.29	\$29.53	-1.2	-8.0	-3.7
Wyoming.....	26.57	26.11	24.61	25.05	25.21	26.61	1.8	1.3	*
Pacific Total	47.53	47.67	46.79	48.15	49.51	48.63	-3	-1.0	-3
California.....	45.21	44.25	43.58	45.32	47.83	48.22	2.2	-1.4	-7
Hawaii.....	w	w	w	w	w	w	w	w	w
Oregon.....	w	w	w	w	w	w	w	w	w
Washington.....	w	\$65.92	\$64.83	\$65.20	\$64.89	\$54.57	w	w	w
U.S. Total	\$35.61	35.72	35.63	35.74	35.88	36.41	-3	-2	-2

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

Notes: Price data are for manufacturing plants only. Average prices are based on the cost including insurance, freight, and taxes.

Source: Energy Information Administration, Form EIA-3, "Quarterly Coal Consumption - Manufacturing Plants."

Table B13. Average Price of Coal Delivered to Coke Plants by Census Division and State, 1989, 1994-1998
(Nominal Dollars per Metric Ton)

Census Division and State	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
Middle Atlantic Total	\$48.67	w	w	w	w	w	w	w	w
New York	w	w	w	w	w	w	w	w	w
Pennsylvania	w	\$50.93	\$49.79	\$50.83	\$50.98	\$49.35	w	w	w
East North Central Total	\$53.34	54.15	54.61	54.12	52.06	54.63	-1.5	0.6	-0.3
Illinois	w	w	w	w	w	w	w	w	w
Indiana	w	\$55.94	\$57.25	\$58.13	\$56.11	\$56.73	w	w	w
Michigan	w	w	w	w	w	w	w	w	w
Ohio	w	\$51.69	\$49.58	\$46.50	\$46.32	\$51.83	w	w	w
South Atlantic Total	w	w	w	w	w	w	w	w	w
Maryland.....	-	-	-	-	-	w	-	-	-
Virginia	w	w	w	w	w	w	w	w	w
West Virginia.....	w	w	w	w	w	w	w	w	w
East South Central Total	\$51.18	w	w	w	w	w	w	w	w
Alabama	w	\$55.16	\$54.42	\$53.38	\$52.31	\$51.45	w	w	w
Kentucky	w	w	w	w	w	w	w	w	w
Tennessee.....	-	-	-	-	-	w	-	-	-
Mountain Total.....	w	w	w	w	w	w	w	w	w
Utah.....	w	w	w	w	w	w	w	w	w
U.S. Total	\$50.77	\$52.48	\$52.17	\$52.18	\$51.32	\$52.35	-3.3	-3	-3

^w Withheld to avoid disclosure of individual company data.
 Note: Average prices are based on the cost including insurance, freight, and taxes.
 Source: Energy Information Administration, Form EIA-5, "Coke Plant Report - Quarterly."

Table B14. Average Price of U.S. Coal Imports by Continent and Country of Origin, 1989, 1994-1998
(Nominal Dollars per Metric Ton)

Continent and Country of Origin	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
North America Total	\$39.00	\$42.01	^R \$40.24	^R \$40.64	^R \$35.98	\$29.38	-7.2	2.0	3.2
Canada	39.02	42.01	^R 40.26	^R 40.72	^R 36.05	29.05	-7.1	2.0	3.3
Mexico	23.01	-	36.85	23.01	23.01	34.46	-	-	-4.4
South America Total	34.35	35.81	^R 34.76	^R 35.70	^R 32.53	38.65	-4.1	1.4	-1.3
Colombia.....	34.40	35.40	^R 35.16	^R 34.46	^R 31.29	39.12	-2.8	2.4	-1.4
Venezuela.....	34.27	36.66	^R 34.03	^R 38.25	^R 35.38	36.90	-6.5	-8	-8
Europe Total	40.56	54.25	-	28.27	-	48.88	-25.2	-	-2.0
Netherlands	-	-	-	-	-	48.88	-	-	-100.0
Norway.....	-	54.51	-	-	-	-	-100.0	-	-
Spain	40.21	-	-	-	-	-	-	-	-
Switzerland	-	45.51	-	-	-	-	-100.0	-	-
United Kingdom	46.33	-	-	28.27	-	-	-	-	-
Asia Total	37.62	36.43	35.77	38.73	37.58	-	3.2	*	-
Indonesia.....	37.62	36.18	35.77	38.73	37.26	-	4.0	.2	-
Vietnam.....	-	54.11	-	-	53.00	-	-100.0	-100.0	-
Oceania & Australia Total	35.15	36.89	36.83	37.00	34.35	37.96	-4.7	.6	-8
Australia.....	35.15	36.89	36.83	34.16	33.09	37.96	-4.7	1.5	-8
New Zealand.....	-	-	-	51.17	48.67	-	-	-100.0	-
Africa Total	-	-	-	-	27.92	-	-	-100.0	-
South Africa, Rep of.....	-	-	-	-	27.92	-	-	-100.0	-
Total ¹	35.48	36.93	^R 36.02	^R 37.03	^R 33.68	35.41	-3.9	1.3	*
U.S. Total ²	35.48	37.83	^R 37.23	^R 37.54	^R 33.85	37.63	-6.2	1.2	-6

¹ The average prices presented in this table, with the exception of U.S. Total, are considered to be representative prices for coal imports and fall within the range of \$20 to \$55 per short ton (\$18.14 to \$49.90 per metric ton), inclusively.

² U.S. Total is the average price of all coal imports.

* Data round to zero.

^R Revised Data.

Notes: Average price is based on the customs import value. Coal imports include coal to Puerto Rico and the Virgin Islands.

Source: U.S. Department of Commerce, Bureau of the Census, "Monthly Report IM 145."

Table B15. Average Price of U.S. Coal Exports by Destination, 1989, 1994-1998
(Nominal Dollars per Metric Ton)

Continent and Country of Destination	1998	1997	1996	1995	1994	1989	Percent Change 1997-1998	Average Annual Percent Change	
								1994-1998	1989-1998
North America Total	\$31.40	\$33.70	\$36.48	\$37.53	\$35.73	\$46.61	-6.8	-3.2	-4.3
Canada ¹	30.48	32.15	35.53	36.92	35.36	46.68	-5.2	-3.6	-4.6
Mexico.....	42.56	45.53	43.77	44.05	48.81	46.06	-6.5	-3.4	-9
Other ²	41.20	41.97	41.92	37.80	39.22	36.52	-1.8	1.2	1.3
South America Total	47.20	48.44	48.29	47.90	46.61	47.96	-2.6	.3	-2
Argentina.....	49.24	52.57	51.11	47.84	46.83	49.09	-6.3	1.3	*
Brazil.....	47.24	48.64	49.25	48.37	46.59	50.32	-2.9	.3	-7
Chile.....	31.61	35.54	35.69	34.94	38.12	32.84	-11.1	-4.6	-4
Venezuela.....	45.04	45.02	45.05	40.61	45.04	43.31	*	*	.4
Other ²	47.73	44.90	40.60	52.08	45.01	44.07	6.3	1.5	.9
Europe Total	47.71	47.42	46.41	45.10	46.14	46.86	.6	.8	.2
Belgium & Luxembourg.....	51.12	50.38	50.41	47.92	46.55	47.91	1.5	2.4	.7
Bulgaria.....	49.13	51.17	48.79	48.54	46.40	54.50	-4.0	1.4	-1.1
Denmark.....	37.50	34.97	32.29	32.37	32.22	36.33	7.2	3.9	.3
Finland.....	44.64	45.89	46.42	43.51	45.34	46.79	-2.7	-4	-5
France.....	50.78	50.66	49.53	48.19	48.76	45.44	.2	1.0	1.2
Germany, FR.....	39.12	49.15	45.28	38.57	49.97	47.25	-20.4	-5.9	-2.1
Iceland.....	61.60	65.40	63.38	61.78	41.89	52.74	-5.8	10.1	1.7
Ireland.....	40.10	41.88	41.17	39.76	37.28	42.01	-4.2	1.8	-5
Italy.....	51.29	50.19	49.66	48.66	47.40	48.06	2.2	2.0	.7
Netherlands.....	49.89	49.57	45.59	46.26	46.22	44.99	.6	1.9	1.1
Norway.....	61.51	64.35	62.89	62.19	60.16	57.73	-4.4	.5	.7
Portugal.....	41.93	40.52	40.26	40.18	39.96	44.35	3.4	1.2	-6
Romania.....	46.64	49.14	51.76	46.77	42.00	50.04	-5.1	2.6	-8
Spain.....	47.28	40.79	41.41	38.30	44.23	51.24	15.9	1.7	-9
Sweden.....	51.98	53.13	52.36	53.14	50.22	49.43	-2.1	.9	.6
Turkey.....	49.52	50.78	48.86	46.97	45.51	47.78	-2.5	2.1	.4
United Kingdom.....	43.00	43.32	42.88	45.11	49.67	50.28	-7	-3.5	-1.7
Other ²	38.50	38.13	37.43	41.96	45.09	48.03	1.0	-3.9	-2.4
Asia Total	43.40	43.79	43.62	43.10	42.58	46.53	-9	.5	-8
China (Mainland).....	33.38	37.41	-	37.99	-	-	-10.8	-	-
China (Taiwan).....	40.01	40.51	40.63	40.73	42.60	41.66	-1.2	-1.5	-4
Israel.....	36.93	40.58	40.12	39.45	36.63	43.18	-9.0	.2	-1.7
Japan.....	42.54	42.99	43.44	43.14	42.47	47.39	-1.0	*	-1.2
Korea, Republic of.....	49.38	48.48	47.10	45.17	44.35	49.36	1.8	2.7	*
Other ²	50.57	44.55	53.89	32.73	41.05	58.24	13.5	5.3	-1.5
Oceania & Australia Total	52.95	44.93	44.89	43.82	44.04	38.57	17.8	4.7	3.6
Other ²	52.95	44.93	44.89	43.82	44.04	38.57	17.8	4.7	3.6
Africa Total	50.17	53.46	48.90	47.47	48.05	44.24	-6.1	1.1	1.4
Algeria.....	48.25	51.41	55.37	52.69	47.66	50.73	-6.1	.3	-5
Egypt.....	48.05	56.54	58.83	54.42	47.55	50.25	-15.0	.3	-5
Morocco.....	34.80	33.81	37.40	36.37	38.62	34.14	2.9	-2.6	.2
South Africa, Rep of.....	53.05	53.64	54.61	52.23	50.34	-	-1.1	1.3	-
Other ²	42.82	43.29	-	-	-	43.96	-1.1	-	-3
Total ³	42.49	44.36	44.67	44.13	43.98	46.77	-4.2	-8	-1.1
U.S. Total ⁴	42.87	44.70	44.93	44.39	44.02	46.87	-4.1	-6	-1.0

¹ Based on the U.S. - Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

² Includes countries with exports less than or equal to 50,000 short tons in 1997.

³ The average prices presented in this table, with the exception of U.S. Total, are considered to be representative prices for coal exports and fall within the range of \$20 to \$60 per short ton (\$18.14 to \$54.43 per metric ton), inclusively.

⁴ U.S. Total is the average price of all coal exports.

* Data round to zero.

Note: Average price is based on the free alongside ship (f.a.s.) value.

Source: U.S. Department of Commerce, Bureau of the Census, "Monthly Report EM 545."

Appendix C

References

Figure C1. Coal-Bearing Areas of the United States

Coal-Producing Regions

Appalachian

Alabama, Georgia, Eastern Kentucky, Maryland, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia.

Interior

Arkansas, Illinois, Indiana, Iowa, Kansas, Western Kentucky, Louisiana, Missouri, Oklahoma, Texas.

Western

Alaska, Arizona, California, Colorado, Montana, New Mexico, North Dakota, Utah, Washington, Wyoming.

Table C1. Classification of Coals by Rank

Coal Reports and Feature Articles

Coal Reports

- *Weekly Coal Production*, DOE/EIA-0218 (00-14).
- *Coal Data: A Reference*, DOE/EIA-0064 (93), February 1995.
- *State Coal Profiles*, DOE/EIA-0576, January 1994.
- *Quarterly Coal Report*, DOE/EIA-0121(99/3Q).
- *The Changing Structure of the U.S. Coal Industry: An Update*, DOE/EIA-0513(93), July 1993.
- *U.S. Coal Reserves: A Review and Update* DOE/EIA-0529(95), August 1996.
- *Annual Energy Outlook 2000*, DOA/EIA-0383(2000), December 1999.
- *Energy Policy Transportation Rate Study, Interim Report on Coal Transportation* DOE/EIA-0549, September 1991.
- *Electric Power Monthly*, DOE/EIA-0226(99/11), November 1999.
- *Electric Power Annual*, DOE/EIA-0348(98), Vol. 2, February 1999.
- *Longwall Mining*, DOE/EIA-TR-0588 March 1995.
- *Monthly Energy Review*, DOE/EIA-0035(99/11) March 2000.
- *Short-Term Energy Outlook: Quarterly Projections* January 1998, DOE/EIA-0202(2000/2Q), April 2000.
- *Cost and Quality of Fuels for Electric Utility Plants 1998*, DOE/EIA-0191(98), May 1999.

Feature Articles

- "U.S. Coal Supply and Demand: 1998 Review," *Mining Engineering*, May 1999, Vol.51,No.5, May 1999, pp.49-56.
- "Carbon Dioxide Emission Factors for Coal," *Quarterly Coal Report*, DOE/EIA-0121 (94/1Q), August 1994.
- "Federal and Indian Coal Lands: A Growing Source of Energy and Revenue," *Coal Production 1992*, DOE/EIA-0118(92), October 1993.
- "Coal Supply and Demand in 1993: A Review, 1993," *Mining Engineering*, May 1994, pp.433-436.
- "Wyoming Coal: An Overview," *Coal Production 1991*, DOE/EIA-0118(91), October 1992.
- "Profile of New Coal Mines in the 1980's," *Coal Production 1990*, DOE/EIA-0118), September 1991.
- "The Comparability of Resource and Reserve Data for Crude Oil, Natural Gas, Coal, and Uranium," *Quarterly Coal Report October-December 1994*, DOE/EIA-0121 (94/4Q) May 1995.
- "Annual Review 1995: Coal Overview," *Mining Engineering*, Vol. 48, No. 5, May 1996, pp. 41-46.
- "Coal Geology, Reserves and Production in Northern and Central Appalachia," *Mining Engineering*, Special Edition, December 1995.

Appendix D

Explanatory Notes

Data Sources

All data in this report were collected by the Energy Information Administration (EIA), U.S. Department of Energy (DOE), except: import and export data, which were collected by the Bureau of the Census (Census Bureau), U.S. Department of Commerce; supplemental export data which were collected by King's Publishing Corporation, Knoxville, Tennessee; Federal and Indian land leasing data which were collected by the U.S. Department of the Interior (Bureau of Land Management and Minerals Management Service); and miner injury and fatality data which were collected by the U.S. Department of Labor (Mine Safety and Health Administration).

Coal Surveys

As early as the 1880's, the U.S. Geological Survey began collecting coal data under a voluntary reporting system. The responsibility for gathering this information was transferred to the Bureau of Mines in the 1920's, initially under the U.S. Department of Commerce and later under the U.S. Department of the Interior, which published the data in its *Minerals Yearbook*. Except for a brief period from 1937 to 1943, when bituminous coal data were collected under the mandatory authority of the Bituminous Coal Act, the Bureau of Mines continued to conduct voluntary coal surveys until the Department of Energy was created.

Coal Production Report (Form EIA-7A)

The Energy Information Administration (EIA) began collecting annual coal production data on October 1, 1977. The 1998 coal production and identification data in this report were collected on Form EIA-7A, "Coal Production Report," and the U.S. Department of Labor's Mine Safety and Health Administration's Form 7000-2, "Quarterly Mine Employment and Coal Production Report" from companies that produced, processed or prepared coal in 1998. All other data collected on Form EIA-7A are reported for only those companies that owned a mining operation that produced, prepared or processed 10,000 short tons or more of coal in 1998 and preparation plants with 5,000 or more employee hours.

So that the EIA may fulfill its data collection functions as specified in the Federal Energy Administration Act of 1974 (Public Law 93-275), response to this survey is mandatory. EIA compares respondents to this survey with lists of mining operations maintained by various State coal mining/licensing agencies and the Mine Safety and Health Administration (MSHA), U.S. Department of Labor, to identify new respondents. No sampling procedures are used. In 1998, there were 1,773 mining operations that produced, processed, or prepared 10,000 or more short tons of coal. All of the data were collected by mail and were edited to ensure that they were complete and accurate.

As in all surveys, data from Form EIA-7A, "Coal Production Report," are subject to various sources of error: (1) coverage (the list of respondents may not be complete or, on the other hand, there may be double counting), (2) nonresponse (all units that are surveyed may not respond or may not provide all the information requested), (3) respondents (respondents may commit errors in reporting the data), (4) processing (the data collection agency may lose or incorrectly transcribe the submissions), (5) concept (the data collection elements may not measure the items they were intended to measure), and (6) adjustment (errors may be made in estimating values for missing data).

Because the annual coal production survey (Form EIA-7A) is not a sample survey, the estimates shown in this report are not subject to sampling error.¹ It is

¹ Sampling error is a measure of the variation that occurs by chance because a sample rather than a complete enumeration of units is surveyed.

not possible to present estimates of nonsampling error, but precautionary steps were taken at each stage of the survey design to minimize the possible occur-

rence of these errors. These steps are described as follows.

The forms are logged within 24 hours of receipt and assigned to a team of data editors consisting of Coal

Table D1. Interquartile Range and Average Mine Price by State and Mine Type, 1998
(Dollars per Short Ton)

Coal-Producing State and Region	Underground		Surface		Total	
	Average Mine Price	Interquartile Range	Average Mine Price	Interquartile Range	Average Mine Price	Interquartile Range
Alabama	\$37.69	\$11.75	\$35.89	\$11.16	\$37.23	\$16.09
Alaska	-	-	w	w	w	w
Arizona	-	-	w	w	w	w
Arkansas	-	-	w	w	w	w
Colorado	16.38	-	\$19.14	-	\$17.30	\$4.01
Illinois	22.96	2.29	22.07	-	22.86	2.52
Indiana	w	w	w	w	19.68	2.62
Kansas	-	-	w	w	w	w
Kentucky Total	\$24.23	\$4.20	\$23.16	\$3.00	\$23.82	\$3.93
Eastern	25.36	2.85	23.57	5.40	24.59	3.04
Western	21.23	2.14	20.24	1.88	21.01	2.98
Louisiana	-	-	w	w	w	w
Maryland	w	w	w	w	\$24.35	\$1.15
Missouri	-	-	\$20.78	-	20.78	-
Montana	-	-	8.25	\$8.85	8.25	4.00
New Mexico	w	w	w	w	20.68	7.15
North Dakota	-	-	\$8.01	-	8.01	.43
Ohio	\$28.48	\$14.03	26.61	\$6.39	27.56	8.90
Oklahoma	w	w	w	w	26.02	2.91
Pennsylvania Total	\$25.40	\$1.91	\$27.20	\$7.45	25.87	2.97
Anthracite	45.19	-	42.75	26.13	42.91	51.71
Bituminous	25.29	1.68	22.84	8.20	24.75	1.91
Tennessee	w	w	w	w	28.69	7.06
Texas	-	-	\$12.47	\$2.43	12.47	3.59
Utah	\$18.47	\$6.28	-	-	18.47	3.91
Virginia	29.55	4.65	26.21	7.32	28.69	4.78
Washington	-	-	w	w	w	w
West Virginia Total	28.25	7.56	\$24.50	\$6.13	\$27.07	\$7.37
Northern	26.14	4.99	21.88	8.46	25.62	6.30
Southern	29.28	5.91	24.79	4.31	27.57	7.01
Wyoming	w	w	w	w	5.41	1.36
Appalachian Total¹	\$27.65	\$5.50	\$25.31	\$4.39	26.85	5.27
Interior Total¹	22.33	2.59	16.05	6.88	18.45	8.17
Western Total¹	17.58	3.42	7.77	3.50	8.76	7.36
East of Miss. River	26.72	5.04	24.07	5.90	25.78	5.38
West of Miss. River	17.66	3.42	8.41	6.99	9.25	9.67
U.S. Total	25.64	6.96	12.92	15.79	17.67	18.73

¹ For a definition of coal-producing regions, see Appendix C.

w Withheld to avoid disclosure of individual company data.

Note: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons of coal during the year. Average Mine Price is calculated by dividing the total free on board (f.o.b) mine value of the coal produced by the total production.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report"; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

team personnel. The editors screen the forms for legibility, completeness, and consistency. Names and address changes are updated in the files. The reported data are compared with data from previous years. Inconsistencies are identified and the respondents contacted for clarification. Computer edits are generated to identify keypunch errors, errors made by coders, out-of-range codes, and unlikely data combinations. Errors are corrected to conform to the data on the submissions or revised after telephone conversations with the company representatives. All changes to reported data are documented. EIA maintains data

from the Form EIA-7A on an automated database at its computing facility in Washington, D.C. The survey forms are filed by EIA identification number organized by State and county.

The survey forms were sent via regular mail in February with a due date of April 2, 1999. Nonresponse letters were mailed April 11 to those mining operations that had not submitted their forms. Subsequent to the letter, attempts were made to contact, by telephone, those nonrespondents whose reported 1997 production was 100,000 short tons or more.

Some forms could not be delivered. Where possible, address corrections were obtained. Some mining operations that had reported in earlier surveys or operated only in 1998 were no longer in business.

Since 1992, California has not reported coal production as the courts determined that the product mined in that State did not meet the standard classification for coal.

Missing *coalbed classification*, *coalbed thickness*, and *coal rank/group* data were estimated using State mining agency production reports, geological data, and previous years' reports for these mines.

When a mine had a missing *disposition value*, its disposition was multiplied by the county-level average mine price to estimate the value. County-level average mine prices were calculated by dividing the total value for the appropriate disposition (open/captive) and the type of mining (underground or surface) by the corresponding total disposition. All missing disposition was classified as open market unless information was available to classify it as captive. Of those mines whose production was 10,000 or more short tons, value data were estimated for 313 mines, representing 4.4 percent (48.8 million short tons) of the disposition total.

When an underground mine had unreported *mining method*, it was assumed that the mining method was conventional.

Missing *recoverable coal reserves* data were estimated by using the mine's 1997 recoverable reserves minus the mine's 1998 production. If this calculation could not be made, the mine's projected production for 1999 was used. If recoverable coal reserves for 1997 and 1998 and projected production for 1999 were all missing, no estimate was made. In 1998, recoverable reserves were reported by or estimated for 1,127 mines, representing 1,045 million short tons, or 77.5 percent of the mines whose production exceeded 10,000 or more short tons.

Missing *recovery percentage* data were estimated by using 1998 recovery percentage averages at the State level for the appropriate type of mining (underground or surface).

Missing *productive capacity* data were estimated by assuming productive capacity was equal to 1998 production. If productive capacity was reported as less than annual production, productive capacity was equated to 1998 production. There were 482 in-scope mines with production of 159.4 million short tons for which 1998 production was used as a proxy for productive capacity, resulting in 100 percent capacity utilization.

These mines included those with productive capacity less than 1998 production, and mines that did not report productive capacity and could not be contacted. If these mines were excluded from the calculation of percent utilization, the U.S. total becomes 81.27 versus 83.51, when those mines are included.

In 1998, there were 50 mines that produced 1.8 million short tons of refuse bituminous and subbituminous coal. Those operations are not included in this report. In 1998, there were 2.7 million short tons of anthracite refuse produced and included in this report. An estimated additional 4 million short tons of anthracite refuse was recovered and used by nonutility power producers in Pennsylvania is not included in this report.

In order to protect the confidentiality of individual respondent's data, a policy was implemented to ensure that the reporting of survey data on mine prices and recoverable reserves in this publication would not associate those data with a particular company. The final phase in the data quality assurance and control procedures is determining which data must be suppressed (withheld) during publication to provide the necessary confidentiality for mines or companies that represent a significant portion of a reported data cell. All withholding analysis is done based upon production volumes. These procedures are performed as follows:

1. Primary Withholding Based on the Number of Respondents in a Cell -- All cells with three or fewer active coal mining operations are suppressed.
2. Residual Withholding Dominance Rule Phase 1 All cells containing between 4 and 10 active coal mining operations are examined. A cell is suppressed if any single respondent accounts for 75 percent or more of the volume for all respondents included in that cell.
3. Residual Withholding Dominance Rule Phase 2 All cells in which two active coal mining operations represent 90 percent or more of the volume for all respondents included in that cell are suppressed.
4. Complementary Suppression -- All tables are reviewed to identify cells which should have data withheld to prevent disclosure of already suppressed cells. An example of cells to be withheld during complementary suppression is underground price, if the surface price is withheld during primary or residual suppression. Because the total price is published, if the underground price is not withheld, the surface price could be calculated using the total price, the underground price, and the underground, surface, and total volumes.
5. Most complementary suppression involves type of mining considerations. Other complementary suppression is based on regional level data. A State or region must be withheld during complementary suppression because an already withheld State could be calculated using other States and the regional total. Cells are also selected for complementary suppression that represent the smallest volumes or that were withheld in prior years.
6. Inter-table effects are also examined regarding complementary suppression. For example, States that are withheld in one State table can influence the complementary suppression of an associated State table. This analysis is very similar to that done at the regional level, except that two tables

are involved rather than one. Finally, similar tables are reviewed to ensure that all like suppressed cells are consistently withheld (suppressed) in all tables in which they appear.

The withholding/suppression of data is performed as an adjunct to the quality assurance (QA) procedures. The work is performed by survey editors, and the QA staff and is reviewed by the survey manager before being submitted to division-level QA review.

All sensitive cells identified in withholding analysis are denoted with the symbol/letter "w." The use of the symbol/letter applies to primary, complementary and inter-table suppressions as well as all withheld data. The symbol/letter "w" is footnoted as follows: "w Withheld to avoid disclosure of individual company data."

The interquartile range is a measure of dispersion of State-level average mine prices. Two States may have the same average mine price, but the spread about this price may be totally different. For a fixed average mine price, a larger interquartile range suggests a broader distribution of coal prices than a smaller interquartile range. The summary statistics (Table D2) given in this publication are weighted by production. The interquartile range (weighted by production) is computed in the following manner:

- Each cell is sorted according to average mine price, from the lowest to the highest.
- For each cell, the corresponding mine's production according to increasing average mine price is divided by that particular cell's total production and multiplied by 100. These percentages are then added as a cumulative percentage of production.
- The first quartile (Q1) is the associated mine price for which the cumulative percentage of production first passes 25 percent. Thus, at least 25 percent of that cell's total production is identified with prices at or lower than Q1.
- The third quartile (Q3), is the associated mine price for which the cumulative percentage of production first passes 75 percent. Thus, at least 75 percent of that cell's total production is identified with prices at or lower than Q3.

The interquartile range is Q3-Q1.

Quarterly Coal Consumption Report - Manufacturing Plants (Form EIA-3)

Form EIA-3 is used to survey U.S. manufacturers that consume 1,000 tons or more of coal per year for all uses other than coke production. These data were collected on a monthly basis until 1980, when the reporting cycle was revised to a quarterly schedule. Data on manufacturers' coal stocks, receipts, prices, and consumption are reported.

Through the end of 1988, all manufacturers that consumed coal were required to file Form EIA-3. Beginning with the first quarter of 1989, only those

manufacturers that consumed 1,000 or more tons in the past year were required to report. In 1998, 601 manufacturers responded to the EIA-3 survey. The response rate for the year was 100 percent. In order to identify undercoverage problems, the data from this survey are compared with shipments to *manufacturers* reported on EIA's "Coal Distribution Report," Form EIA-6A. At present, the coal receipts reported by *manufacturers* on Form EIA-3 cover approximately 99 percent of the coal shipments to *manufacturers* on Form EIA-6A. Consequently, the coal consumption data gathered on the Form EIA-3 do not represent the total consumption at manufacturing plants. See Technical Note 5 for data adjustment procedures for coal consumption for the other industrial sector.

Current year data from this survey are preliminary and unrevised in the January - March, April - June, and July - September issues of the *Quarterly Coal Report* (DOE/EIA-0121). In the October - December issue, any revisions necessary for the entire year are applied and the data are considered final.

The respondent list of manufacturers for Form EIA-3 is compared with lists of coal-consuming manufacturing plants from State Air Quality and Energy Offices. When new respondents are found, they are added to the survey mailing list.

Annual Coal Quality Report - Manufacturing Plants (Form EIA-3A)

Form EIA-3A contains questions on the origin of coal (State or Country), the quantity of coal receipts, the Btu, sulfur and ash content of the coal receipts, and the basis used to determine the coal quality data. The threshold for the annual collection will be the same as for the EIA-3: manufacturing plants that consume in excess of 1,000 short tons of coal per year. In 1998, 601 manufacturers responded to the EIA-3A survey. The response rate for the year was 100 percent.

Coke Plant Report (Form EIA-5)

Form EIA-5, a quarterly report of coal receipts, carbonization, and stocks, and of coke and breeze production, distribution, and stocks, is used to survey all U.S. coke plants.

Coke plants were surveyed monthly and a supplemental survey was taken annually until 1981, when the reporting cycle was revised to a quarterly schedule with an annual supplemental survey. In 1985, collection of the annual supplement was ended.

In 1998, there were 24 respondents to the EIA-5 survey, and the response rate was 100 percent. The respondent list for this survey is updated by continuous monitoring of the industry literature.

Current year data from this survey are preliminary and unrevised in the January - March, April - June, and

July - September issues of the *Quarterly Coal Report* (DOE/EIA-0121). In the October - December issue, any revisions necessary for the entire year are applied and the data are considered final.

Annual Coal Quality Report - Coke Plants (Form EIA-5A)

This form contains questions on the origin of coal (State or country), the quantity of coal receipts, the volatile matter, sulfur and ash content, and the basis used to determine the coal quality data. There is no threshold for this form. In 1998, there were 24 respondents to the EIA-5A survey, and the response rate was 100 percent.

Coal Distribution Report (Form EIA-6A)

Form EIA-6A is used to survey all U.S. companies (producers and/or distributors) that own or purchase and distribute more than 50,000 short tons annually.² Data on coal production and purchases, distribution by consumer category, and method of transportation are reported.

In 1998, there were about 950 respondents to the EIA-6A survey. Until the end of 1988, coal distribution companies were required to report production on a Bureau of Mines district basis. For the year 1989, respondents were required to report on a BOM district/State basis. Beginning with the first quarter of 1990, respondents were required to report on a State basis. The response rate for the current quarter was 100 percent. The annual production total reported on Form EIA-6A exceeds 99 percent of total production as reported by all mines on Form EIA-7A, "Coal Production Report," due to the difference in reporting thresholds. The data gathered on the Form EIA-6A only represent the domestic coal distributed; therefore, imported coal distributed during the quarter is not included.

Current year data from this survey are preliminary and unrevised in the January - March, April - June, and July - September issues of the *Quarterly Coal Report* (DOE/EIA-0121). In the October - December issue, any revisions necessary for the entire year are applied and the data are considered final.

The respondent list for this survey is updated by comparing it with lists of coal producers from the Mine Safety and Health Administration (MSHA), U.S. Department of Labor, and from similar lists maintained by various State agencies. Also, new respondents are frequently identified on Form EIA-6A itself when other companies are named as sources of coal purchases.

Electric Utility Surveys

Coal data appear in this report from three surveys of electric utilities --from all generating electric utilities and from fossil-fueled plants.

The Census Bureau collected and published the results of a census taken every 5 years from 1902 to 1937 on the electric light and power industries and some data on industrial production of electric energy. The U.S. Geological Survey collected data on capacity and generation of electric utilities from 1920 to 1936, when this activity was turned over to the Federal Power Commission (FPC).

All data are presented as reported on the surveys. No estimates or other adjustments are made for missing data. The data are maintained in a computer system and are edited to ensure that they are reasonable, consistent, and complete. For additional information from these surveys and for other electric utility data, see the EIA publication, *Electric Power Monthly* (DOE/EIA-0226).

Monthly Power Plant Report (Form EIA-759)

Form EIA-759 (which, until 1982, was called FPC Form 4) is used to survey all generating electric utilities. The Federal Power Act and FPC Order Number 141 define the legislative authority to collect power production data. Consumption and stocks of coal and other fuels at each plant are reported. The respondents to Form EIA-759, approximately 700 plants, accounted for 100 percent of total electric utility generation.

Beginning with the 1996 data collection, the Form EIA-759 is a cutoff model sample of approximately 360 electric utilities drawn from the frame of all operators of electric utility plants (approximately 700 electric utilities) that generate electric power for public use. Data will be collected on an annual basis from the remaining operators of electric utility plants. The new monthly data collection is from all utilities with at least one plant with a name-plate capacity of 25 megawatts or more. (Note: includes all nuclear units). However, the few utilities that generate electricity by using renewable fuel sources other than hydroelectric are all included in the sample. The Form EIA-759 is used to collect monthly data on net generation; consumption of coal, petroleum, and natural gas; and end-of-the-month stocks of coal and petroleum for each plant by fuel-type combination.

Current year data from this survey are considered final.

² For the States of Arkansas, Maryland, Oklahoma, and the anthracite portion of Pennsylvania, the threshold is 10,000 tons.

Monthly Report of Cost and Quality of Fuels for Electric Plants (FERC Form 423)

Federal Energy Regulatory Commission (FERC) Form 423 is used to survey all fossil-fueled plants with a total steam-generating capacity of 50 megawatts or more. It is submitted by approximately 230 electric utilities. (Before 1983, this form was called FPC Form 423, and all fossil-fueled plants with a total generating capacity of 25 megawatts or more were surveyed.) In 1972, the FPC issued Order Number 453, which included the legislative authority to create FERC Form 423. Cost, quality, and source of fuels (by State or country of origin), including coal, are reported. Current year data from this survey are considered final.

Annual Nonutility Power Producer Report (Form EIA-867)

The Form EIA-867 is a restricted-universe census used to collect annual data from all existing and planned nonutility power producers in the United States during the years 1993 through 1997. In 1992, the reporting threshold of the Form EIA-867 was lowered to include all facilities with a combined nameplate capacity of 1 or more megawatts. Previously data were collected every 3 years from facilities with a nameplate capacity between 1 and 5 megawatts. For the purpose of this data collection, a nonutility power producer is an enterprise that has electric generating capacity and is not an electric utility. They include qualifying cogenerators, qualifying small power producers, and other nonutility generators (including independent power producers) without a designated franchised service area. The form is used to collect data on the installed capacity, energy consumption, generation, and electric energy sales to electric utilities from approximately 2,000 facilities.

Annual Electric Generator Report - Nonutility (Form EIA-860B)

The Form EIA-860B is a mandatory survey of all existing and planned nonutility electric generating facilities in the United States with a total generator nameplate capacity of 1 or more megawatts. The form is used to collect data on the installed capacity, energy consumption, generation, and electric energy sales to electric utilities and other nonutilities by facility. Additionally, the form is used to collect data on the quality of fuels burned and the types of environmental equipment used by the respondent. These data are aggregated to provide geographic totals for selected States and at the Census division and national levels.

Export and Import Data

Export and import data (except imports to electric utilities, manufacturing plants and coke plants, which are reported on the FERC Form 423, EIA-3A, and EIA-5A, respectively.) are obtained from the Census Bureau--export data from the monthly EM 545 (formerly EM 522) report, import data from the monthly IM 145 report. The Census Bureau compiles these data monthly from documents filed with the U.S. Customs Service as required by law. They include shippers' export declaration forms, import entry forms, and warehouse withdrawal forms. No sampling procedures are used. The Census Bureau publication *Guide to Foreign Trade Statistics* describes the foreign trade statistics program, including the EM 545 and IM 145 monthly reports. Data from these surveys are considered final at the time of publication. Import data for the years 1994 through 1997 have been revised in this publication due to the misclassification of coal import ranks and the translation of this rank to another code.

Foreign distribution of U.S. coal, major exporting State, and destination, along with foreign distribution of metallurgical and steam coal (Tables 62, 63, and 64, respectively), was determined using EIA-6A distribution data by origin State, and coal export data from King's COALBASE (King Publishing Corporation, Knoxville, Tennessee) which gives the metallurgical and steam breakdown as well as the country destination data. The percentage of metallurgical and steam coal for each country of destination are applied to the EIA-6A export figures for each State of origin to derive coal distribution data that link State of origin to countries of destination by type of coal. The King's destination country data are considered to be more accurate than the Census country-of-destination data because it account for transshipments through intermediate countries to final destination countries, whereas the Census data would designate the destination as the intermediate country.

Copies of the survey forms and instructions used to collect data appearing in this publication can be obtained by calling EIA's National Energy Information Center at (202) 586-8800.

Technical Notes

3. Residential and Commercial

To reduce the reporting burden to coal users, the EIA does not conduct any survey of coal data from residential and commercial users of coal. Shipments of coal to this sector, reported by producers and distributors of coal on Form EIA-6A, are equated to coal receipts and consumption by the *residential and commercial* sector, assuming no stock changes.

4. Consumer Prices

Prices are derived for each end-use sector as follows:

Electric Utilities. Prices are reported for each plant in cents-per-million Btu on FERC Form 423. The price per ton of coal is calculated at each plant using cents-per-million Btu and the average Btu content per pound of coal for the appropriate rank of coal. The average prices appearing in the tables (e.g., across all States) are calculated by summing the dollar value at each plant (short tons of coal multiplied by price per short ton) and dividing by the corresponding total tons. For more information about prices of coal at *electric utilities*, see the EIA publication, *Electric Power Monthly* (DOE/EIA-0226).

Coke Plants. Respondents are asked to report the number of tons of coal received (or coke distributed) on Form EIA-5 and the total value of that coal (or coke) in dollars. Average prices are calculated by summing the reported values (e.g., across all States) and dividing by the corresponding total tons.

Other Industrial Plants. Respondents (manufacturing plants only) are asked to report the number of tons of coal received on Form EIA-3 and the total value of that coal in dollars. Average prices are calculated by summing the reported values across all States and dividing by the corresponding total tons.

Residential and Commercial. Data are not collected. See Technical Note 3.

1. Differences in Related Coal Data

Coal Production versus Coal Distribution. Coal production represents newly mined coal. Coal distribution represents shipments of newly mined coal and coal from producer/distributor stockpiles (previously mined coal).

Coal Distribution versus Coal Receipts. Differences in coal distribution data and coal receipts data are due to the time lag between distribution and receipt of coal shipments, and due to the survey threshold differences. In addition, coal distributed includes only domestic coal, whereas receipts include imported coal.

Foreign Distribution of U.S. Coal versus U.S. Coal Exports. Foreign distribution of U.S. coal does not equal U.S. coal exports because there are differences in reporting time and survey thresholds.

Receipts of Imported Coal versus U.S. Coal Imports. Receipts of imported coal at electric utilities and manufacturing and coke plants does not equal U.S. coal imports due to reporting time differences. In addition, it does not include receipts at independent power producers.

2. Other Industrial Plants and Manufacturing

The *other industrial plants* end-use sector includes the *manufacturing*, agriculture, forestry and fishing, mining, and construction industries. Manufacturing accounts for approximately 97 percent of the coal receipts and consumption and 100 percent of the coal stocks in the *other industrial plants* sector as reported herein. Data sources for the *other industrial plants* sector and the *manufacturing* sector are Forms EIA-6A and EIA-3, respectively. The source statement in each table identifies the survey used to collect coal data for the *other industrial plants* sector, and the following technical notes describe the methodology used for deriving data.

5. Consumption

Annual Data

Annual coal consumption data are sums of quarterly or monthly data described below except for nonutility power producers whose coal consumption is not included in this report. These data are however, reported on Form EIA-867 and published in the *Electric Power Annual* (DOE/EIA-0348).

Electric Utilities. Consumption is reported on Form EIA-759.

Nonutility Electric Generating Facilities. For 1997 and prior years, consumption is reported on Form EIA-867. For 1998 and forward years, consumption data is reported on the Form EIA-860B.

Coke Plants. Consumption is reported on Form EIA-5.

Other Industrial Plants. In deriving a quarterly estimate for coal consumption for the *other industrial plants* sector, the first step is to equate consumption to beginning stocks plus receipts minus ending stocks. In terms of an equation, consumption can be expressed as $C = S_b + R - S_e$, where S_b = beginning stocks, R = receipts, and S_e = ending stocks.

Therefore, consumption is $C = (S_b - S_e$ (change in stocks)) + R . Next, stock change at the State level is equated to the stock change for that State as reported on Form EIA-3, receipts at the State level are derived as described in Section 3, and a computed consumption is derived using the same equation for each State. Finally, the quarterly consumption (C) at the State level is equated to the maximum of the computed consumption at the State level, as previously described, and the quarterly consumption for that State as reported on Form EIA-3. This process ensures that State-level consumption for the *other industrial plants* sector is always greater than or equal to the *manufacturing* sector consumption for that State. Total quarterly consumption for the *other industrial plants* sector is computed by summing the quarterly State-level consumption figures.

Residential and Commercial. Shipments to the *residential and commercial* sector as reported on Form EIA-6A are defined as consumption as well as receipts for this end-use sector.

EIA publishes monthly estimates of coal consumption in the *Monthly Energy Review* (DOE/EIA-0035).

Monthly coal consumption at electric utility plants is derived directly from Form EIA-759. Prior to 1980, monthly coal consumption at coke plants was derived directly from Form EIA-5. For 1981 through 1987, it was derived from the quarterly coal consumption reported on Form EIA-5, using the ratios of monthly to quarterly consumption in 1979, the last year that coke plant data were collected monthly on Form EIA-5. These ratios by month (January - December)

are 0.3377, 0.3200, 0.3423; 0.3529, 0.3462, 0.3009; 0.3364, 0.3347, 0.3289; and 0.3273, 0.3301, 0.3426.

Starting with 1988, monthly coal consumption at coke plants is derived from quarterly coal consumption reported on Form EIA-5, using ratios derived from monthly data on raw steel production published by the American Iron and Steel Institute (AISI) on Form AIS7. The ratio is the proportion of monthly raw steel production from open hearth and basic oxygen process furnaces to the quarterly raw steel production from those furnace types.

Prior to 1978, coal consumption for the *other industrial plants* sector (i.e., industrial users minus coke plants) was derived by using monthly data reported on Form EIA-3 to modify baseline coal consumption figures from the most recent Census of Manufactures or Annual Survey of Manufactures, Bureau of the Census, U.S. Department of Commerce. For 1978 through 1987, data from Forms EIA-3 and EIA-6A are used to compute monthly coal consumption for the *other industrial plants* sector.

Given the quarterly consumption for the *other industrial plants* sector (C), the monthly consumption for the sector (C_m) is estimated for each month in the quarter as $C_m = (C_m3/C3) \times C$ where $C_m3/C3$ is the ratio of monthly to quarterly coal consumption as reported on Form EIA-3. For the 1978 coal consumption figures, the ratios used are based on 1978 EIA-3 data. For 1979 through 1987, the ratios used are based on the 1979 EIA-3 data. These 1979 ratios by month (January - December) are 0.3593, 0.3264, 0.3143; 0.3485, 0.3332, 0.3183; 0.3317, 0.3407, 0.3276; and 0.3045, 0.3253, 0.3702.

Starting with 1988, monthly coal consumption for the *other industrial plants* sector is derived from quarterly coal consumption reported on Form EIA-3 using monthly ratios derived from the industrial production indices published by the Board of Governors of the Federal Reserve System. Six major industry groups' indices are used as the basis for calculating the monthly ratios. These groups are food manufacturing (North American Industry Classification System (NAICS 311), paper manufacturing (NAICS 322), chemicals manufacturing (NAICS 325), petroleum and coal products (NAICS 324), nonmetallic mineral products (NAICS 327) and primary metal manufacturing (NAICS 331).

The monthly ratios are computed as the monthly sum of weighted indices as a proportion of the quarterly sum of weighted indices, using the 1985 proportion as the weight.

Prior to 1980, monthly coal consumption for the *residential and commercial* sector was derived by using monthly data reported on Form EIA-2, "Monthly Coal Report -- Retail Dealers and Upper Lake Docks," to modify baseline coal consumption figures developed by the Bureau of Mines, U.S. Department of the Interior.

For 1980, the quarterly coal consumption figures in the *residential and commercial* sector are converted

to monthly coal consumption figures using the ratios of monthly to quarterly coal deliveries to this sector in 1979 as reported on Form EIA-2. These 1979 ratios by month (January-December) are 0.4002, 0.3502, 0.2496; 0.4805, 0.2901, 0.2294; 0.3126, 0.2952, 0.3922; and 0.2931, 0.3101, 0.3968. The 1981 and 1982 monthly coal consumption figures were derived using the 1979 ratios but were also modified according to heating/cooling degree-days. For 1983 through 1987, coal consumption figures are converted to monthly coal consumption figures using only the ratios of monthly to quarterly coal deliveries to this sector in 1979.

Starting with 1988, monthly coal consumption figures are derived using the monthly national average population weighted heating/cooling degree-days obtained from the National Oceanic and Atmospheric Administration. The ratio is the proportion of the monthly national sum of heating and cooling degree-days to the quarterly sum.

6. Stocks

Annual stocks are calculated at the end of the year or the end of the fourth quarter. Coal stocks are derived for each end-use sector as follows:

Electric Utilities. Stocks are reported on Form EIA-759.

Coke Plants. Stocks are reported on Form EIA-5.

Other Industrial Plants. Stocks are reported on Form EIA-3, i.e., stocks at *manufacturing* plants only. Technical Note 2 discusses the difference between *other industrial plants* and *manufacturing plants*.

Residential and Commercial. Data are not available. See Technical Note 3.

Producer and Distributor. Stocks are reported on Form EIA-6A.

7. Methods of Transportation

Rail: Shipments of coal moved to consumers by rail, either private or public/commercial. Included is coal hauled to or away from a railroad siding by truck.

Water Transportation: Shipments of coal moved by one of the three methods--river, Great Lakes, or tidewater piers and coastal ports. Included in these shipments is coal hauled to or from water loading facilities by other means of transportation.

River: Shipments of coal moved to consumers via river by barge, except shipments to Great Lakes

coal loading docks or tidewater piers or coastal ports.

Great Lakes: Shipments of coal moved to consumers via the Great Lakes. These shipments are moved via the Great Lakes coal loading docks, which are identified by name and locations as follows: Superior Midwest Energy Terminal, Superior, Wisconsin; Bessemer & Lake Erie Coal Storage & Transfer Facility, Conneaut, Ohio; B&O Railroad Coal Loading Dock, Lorain, Ohio; C&O Railroad Presque Isle Docks, Toledo, Ohio; Lakefront Dock & Railroad Terminal Company Coal Loading Dock, Toledo, Ohio; N&W Sandusky Coal Pier No. 3, Sandusky, Ohio; ConRail Coal Transfer Facilities, Ashtabula, Ohio; Rail to Water Transfer Corporation Dock, Chicago, Illinois.

Tidewater Piers and Coastal Ports: Shipments of coal moved to tidewater piers and coastal ports for further shipments to consumers via coastal water or ocean. The tidewater piers are identified by name and location as follows: B&O Curtis Bay Coal Piers, Baltimore, Maryland; C&O Coal Piers Nos. 14 & 15, Newport News, Virginia; N&W Lamberts Point Coal Piers Nos. 5 & 6, Norfolk, Virginia; Alabama State Docks Bulk Handling Plant, Mobile, Alabama; Alabama State Docks/McDuffie Terminals, Mobile, Alabama; Canton Coal Piers, Baltimore Harbor on the Chesapeake Bay; Greenwich Coal Pier, Greenwich Point, Philadelphia, Pennsylvania, on Delaware River; Port Richmond Pier, Pier 18 Port Richmond, Philadelphia, Pennsylvania, on the Delaware River; Galveston Regional Coal Distribution Center, Pelican Island, Galveston, Texas; International Marine Terminals/Plaquemines Parish Terminal, Mile 57 AHP-Mississippi River, approximately 30 miles south of New Orleans; Energy Terminals of Houston, Inc., a Subsidiary of Soros Associates, Houston, Texas. Coastal Ports are those located at Charleston, South Carolina; New York, New York; San Diego, California; Los Angeles, California; and Seattle, Washington.

Truck: Shipments of coal moved to consumers by truck.

Tramway, Conveyor, or Slurry Pipeline: Shipments of coal moved to consumers by tramway, conveyor, or slurry pipeline.

8. Census Export and Import Data

Export and import data are obtained from the Bureau of the Census, U.S. Department of Commerce, where they are compiled monthly from documents filed with the U.S. Customs Service, as required by law.

Each coal shipment is reported in short tons with corresponding total dollar values. EIA converts all value data obtained from the Census Bureau to average price data by dividing the dollar value by the quantity.

Based on an analysis and sample validation of the Census Bureau import and export data conducted by the EIA, it was determined that some of the coal and coke data collected from the Census Bureau may be misleading or incorrect (particularly those data associated with very small quantities or very high prices). Because of this, a methodology was developed to edit the Census Bureau price data.

Prior to 1989, certain data cells had been suppressed for publication purposes only: (1) average import coal prices of \$50.00 or more per short ton; (2) average export coal prices of \$60.00 or more per short ton; (3) average coke prices of \$200.00 or more per short ton; (4) all percent changes of 500 percent or more.

Beginning with 1989, coal export data were categorized as metallurgical coal and steam coal, rather than as bituminous steam coal, lignite, anthracite, and bituminous metallurgical coal.

In addition, coal export tables were revised to present those countries to which the United States exported more than 50,000 short tons in the prior calendar year. The remaining countries in each continent were aggregated in an "other" category. This reduces the number of empty cells and highlights the major importers of U.S. coal. All coke export and import, and coal import countries and quantities are displayed.

The following methodology was used to derive the typical average prices as presented in the price tables. For all coal, a price distribution was derived from the prior calendar year export price data. Since extreme price variations in the Census Bureau data are the exception rather than the rule, the price distribution was used to identify a typical price range. The price distribution, from low to high, along with the frequency of each price (quantity) was analyzed to determine the representative prices. The extreme prices at both ends of the distribution were eliminated to arrive at a price range that covered at least 90 percent of the exports. This price range was considered to include typical or representative prices. Considering the records that fell within the typical price range, the weighted average price was calculated by country of destination and type of coal.

The same procedure was used to determine the typical average prices of coal imports. In addition to the average prices based on the above methodology, a U.S. total row is presented in the price tables, which represents the average price using all the Census Bureau data.

For reporting purposes, the month of exportation reflects the month in which the shipment leaves the United States. The month of importation generally is based on the month in which the U.S. Customs Service releases the merchandise to the importer. For both sets of data, however, there can exist a small carry-over from the actual month of exportation or importation to a subsequent month, usually the succeeding month. A number of factors in processing account for this, e.g., late receipt of a document for an end-of-month shipment, or rejection of a shipment by

the computer due to failure to meet established edit criteria. These limitations should be considered when making comparisons.

Based on the U.S. - Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

Comparing Census reported imported coal figures in Table 35 with EIA reported imported coal receipts at electric utilities, manufacturers, and coke plants for 1997 shows a difference of about 1.3 million short tons. The main reason for this is that the EIA receipts data do not cover imported coal received by nonutility power producers who are not in the manufacturing sector.

The import data for the years 1994 through 1996 have been revised. These revisions were done because of a missed "Harmonized Tariff Schedule" code for a category of coal.

9. Revisions

All data published in this report are considered final. The Office of Coal, Nuclear, Electric and Alternate Fuels has adopted the following policy with respect to the revision and correction of recurrent data in energy publications:

1. Annual survey data collected by this office are published either as preliminary or final when first appearing in a data report. Data initially released as preliminary will be so noted in the report. These data will be revised, if necessary, and declared final in the next publication of the data.
2. All monthly and quarterly survey data collected by this office are published as preliminary. These data are revised only after the completion of the 12-month cycle of the data. No revisions are made to the published data before this.
3. After data are published as final, corrections will be made only in the event of a greater than one percent difference at the national level. Corrections for differences that are less than the 1-percent threshold are left to the discretion of the Office Director.

10. Price Data and Taxes

F.O.B. mine coal prices and prices of coal delivered to or received by end-use consumers (electric utility plants, manufacturing plants, and coke plants) as reported in this publication include relevant local, State and Federal excise and sales taxes.

**Table D2. Implicit Price Deflator,
1989-1998**

Year	Implicit Price Deflator (1992 = 100)
1989	89.7
1990	93.6
1991	97.3
1992	100.0
1993	102.6
1994	105.1
1995 ^R	107.5
1996 ^R	109.5
1997 ^R	111.6
1998	112.7

^R Revised data.

Source: Bureau of Economic Analysis, U.S. Department of Commerce, *Survey of Current Business*.

Glossary

Agglomerating Character: Agglomeration describes the caking properties of coal. Agglomerating character is determined by examination and testing of the residue when a small powdered sample is heated to 950 degrees centigrade under specified conditions. If the sample is "agglomerating," the residue will be coherent, show swelling or cell structure, and be capable of supporting a 500-gram weight without pulverizing.

Anthracite: A hard, black lustrous coal, often referred to as hard coal, containing a high percentage of fixed carbon and a low percentage of volatile matter. Comprises three groups classified according to the following ASTM Specification D388-91a, on a dry mineral-matter-free (mmf) basis:

	Fixed Carbon Limits		Volatile Matter	
	GE	LT	GT	LE
Meta-Anthracite	98	-	-	2
Anthracite	92	98	2	8
Semianthracite	86	92	8	14

GE = Greater than or equal to
 LT = Less than
 GT = Greater than
 LE = Less than or equal to

Anthracite coal is non-agglomerating. If agglomerating, semianthracite is classified in the low-volatile group of the bituminous class.

Ash: Impurities consisting of silica, iron, alumina, and other incombustible matter that are contained in coal. Ash increases the weight of coal, adds to the cost of handling, and can affect the burning characteristics. Ash content is measured as a percent by weight of coal on an "as received" or a "dry" (moisture-free, usually part of a laboratory analysis) basis.

Auger Mine: A surface mine where coal is recovered through the use of a large-diameter drill driven into a coalbed in a hillside. It usually follows contour surface mining, particularly when the overburden is too costly to excavate.

Average Annual Percent Change:

$$\sqrt[n]{\frac{V_n}{V_0}} - 1 \quad (1)$$

Where: V_0 = the value for the base period.
 V_n = the value for the n^{th} period.

n = the number of periods.

Average Mine Price: The ratio of the total value of the coal produced at the mine to the total production tonnage. (See F.O.B. mine price and F.O.B rail/barge price.)

Average Number of Miners: The arithmetic mean number of miners working each day at a mining operation. Includes maintenance as well as production work performed.

Average Production per Miner per Hour: The ratio of the total production at a mining operation to the total direct labor hours worked at the operation.

Average Quality of Coal: Refers to individual measurements such as heat value, fixed carbon, moisture, ash, sulfur, phosphorus, major, minor, and trace elements, coking properties, petrologic properties, and particular organic constituents. The individual quality elements may be aggregated in various ways to classify coal for such special purposes as metallurgical, gas, petrochemical, and blending usages.

Average Recovery Percentage: Average recovery percentage represents the percentage of coal that can be recovered from coal reserves at reporting mines, averaged for all mines in the reported geographic area.

Bituminous Coal: The most common coal. It is dense and black (often with well-defined bands of bright and dull material). Its moisture content is usually less than 20 percent. It is used for generating electricity, making coke, and for space heating. Comprises five groups classified according to ASTM Specification D-388-91a, on a dry mineral-matter-free mmf basis for fixed-carbon and volatile matter and a moist mmf basis for calorific value. Coals having 69 percent or more fixed carbon on the dry, mineral-matter-free basis shall be classified according to fixed carbon, regardless of calorific (heating) value. High-volatile C bituminous coal is agglomerating, but other bituminous coals are commonly agglomerating. However, it is recognized that there may be nonagglomerating varieties in these groups of the bituminous class, and there are notable exceptions in the high-volatile C bituminous group. Coals with less than 69 percent fixed carbon, but with 14,000 or more Btu per pound, are classified as high-volatile A bituminous.

	Fixed Carbon Limits		Volatile Matter Limits		Calorific Value Limits Btu/lb.	
	GE	LT	GT	LT	GE	LE
lv	78	86	14	22	-	-
mv	69	78	22	31	-	-
hvA	-	69	31	-	14000	-
hvB	-	-	-	-	13000	14000
hvC	-	-	-	-	10500	13000
lv	= Low-volatile bituminous coal					
mv	= Medium-volatile bituminous coal					
hvA	= High-volatile A bituminous coal					
hvB	= High-volatile B bituminous coal					
hvC	= High-volatile C bituminous coal					
GE	= Greater than or equal to					
LT	= Less than					
GT	= Greater than					
LE	= Less than or equal to					

Btu (British thermal unit): The amount of heat needed to raise the temperature of 1 pound of water by 1 degree Fahrenheit. The Btu is a convenient measure by which to compare the energy content of various fuels.

Cannel Coal: A variety of bituminous coal that is noncaking, contains a high percentage of volatile matter, ignites easily, and burns with a luminous smokey flame.

Capacity Utilization: Capacity utilization is computed by dividing production by productive capacity and multiplying by 100.

Captive Coal: Coal produced and consumed by the mine operator, a subsidiary, or parent company (for example, steel companies and electric utilities).

Carbon Dioxide: CO_2 A colorless, odorless, incombustible gas formed during combustion in fossil-fuel electric generation plants.

Census Divisions: The nine geographic divisions of the United States established by the Bureau of the Census, U.S. Department of Commerce for statistical analysis. The boundaries of Census divisions coincide with State boundaries. In some cases, the Pacific Division is subdivided into the Pacific Contiguous and Pacific Noncontiguous areas.

CIF: See Cost, Insurance, Freight.

Coal Carbonized: The amount of coal decomposed into solid coke and gaseous products by heating in a coke oven in a limited air supply or in the absence of air.

Coal (Coke): See Coke (coal).

Coal Mining Productivity: Coal mining productivity is calculated by dividing total coal production by the total direct labor hours worked by all mine employees.

Coal Preparation: The process of sizing and cleaning coal to meet market specifications by removing impurities such as rock, sulfur, etc. May include crushing, screening, or mechanical cleaning.

Coal-Producing Regions: A geographic classification of coal-producing States. The States in the Appalachian Region are Alabama, Georgia, eastern Kentucky, Maryland, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia. The States in the Interior Region are Arkansas, Illinois, Indiana, Iowa, Kansas, western Kentucky, Louisiana, Missouri, Oklahoma, and Texas. The States in the Western Region are Alaska, Arizona, California, Colorado, Montana, New Mexico, North Dakota, Utah, Washington, and Wyoming.

Coal-Producing States: The States where mined and/or purchased coal originates are defined as follows: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Illinois, Indiana, Iowa, Kansas, Kentucky Eastern, Kentucky Western, Louisiana, Maryland, Missouri, Montana, New Mexico, North Dakota, Ohio, Oklahoma, Pennsylvania anthracite, Pennsylvania bituminous, Tennessee, Texas, Utah, Virginia, Washington, West Virginia Northern, West Virginia Southern, and Wyoming. The following Coal-Producing States are split in origin of coal, as defined below:

- **Kentucky, Eastern** All mines located in counties other than the Western Kentucky counties.
- **Kentucky, Western** All mines in the following counties in Western Kentucky: Butler, Caldwell, Christian, Crittenden, Daviess, Edmonson, Grayson, Hancock, Henderson, Hopkins, Logan, McLean, Muhlenberg, Ohio, Simpson, Todd, Union, Warren, and Webster.
- **Pennsylvania Anthracite** All mines in the following counties: Carbon, Columbia, Dauphin, Lackawanna, Lebanon, Luzerne, Northumberland, Schuylkill, Sullivan, and Susquehanna. All anthracite mines in Bradford County.
- **Pennsylvania Bituminous** All mines located in counties other than the Pennsylvania anthracite counties and all bituminous mines in Bradford County.
- **West Virginia, Northern** All mines in the following counties (formerly defined as Coal-Producing Districts 1, 3, & 6): Barbour, Brooke, Braxton, Calhoun, Doddridge, Gilmer, Grant, Hancock, Harrison, Jackson, Lewis, Marion, Marshall, Mineral, Monongalia, Ohio, Pleasants, Preston, Randolph, Ritchie, Roane, Taylor, Tucker, Upshur, Webster, Wetzel, Wirt, and Wood.
- **West Virginia, Southern** All mines in the following counties (formerly defined as Coal-Producing Districts 7 & 8): Boone, Cabell, Clay, Fayette, Greenbrier, Kanawha, Lincoln, Logan, Mason, McDowell, Mercer, Mingo, Monroe, Nicholas, Pocahontas, Putnam, Raleigh, Summers, Wayne, and Wyoming.

Coal Rank/Group: A classification of coal based on fixed carbon, volatile matter, calorific (heating) value, and agglomerating character. Coal is ranked progressively from lignite (least carbonaceous) to anthracite (most carbonaceous). The rank of coal can also deter-

mined by measuring the reflectance of vitrinite, one of several organic components of coal. The lower rank coal can be classified based on heat content. The heat content of the higher rank coals is generally above 14 thousand Btu per pound for each coal rank group (except for meta-anthracite, which trends slightly lower), and heat content ranges vary within a relatively narrow range. Since heat content is not a dependable criterion for these higher rank coals, their rank categories are instead described by degree of metamorphism, or "coalification," a property that is measured by fixed carbon content. Finally, the agglomerating character of bituminous coals is a critical attribute for certain coal consumers, and thus agglomerating character has come to define the distinctions between certain adjacent coal groups. Some high-volatile C bituminous and subbituminous A coals can be distinguished only on the basis of agglomerating character. Percentages are based on dry mineral-matter-free coal. Volatile matter (not shown) is the complement of fixed carbon; that is, the percentages of fixed carbon and volatile matter sum to 100 percent. As fixed carbon percentage decreases, therefore, volatile matter percentage increases by the same amount.

Coal Stocks: The supply of coal at a mine, plant, or utility at the end of the reporting period.

Coalbed: A bed or stratum of coal. Also called a coal seam.

Cogenerator: A generating facility that produces electricity and another form of useful thermal energy (such as heat or steam) used for industrial, commercial, heating, and cooling purposes. To receive status as a qualifying facility (QF) under the Public Utility Regulatory Policies Act (PURPA), the facility must produce electric energy and "another form of useful thermal energy through the sequential use of energy," and meet certain ownership, operating, and efficiency criteria established by the Federal Energy Regulatory Commission (FERC). (See the Code of Federal Regulation, Title 18, Part 292.)

Coke (coal): In general, coke is made from bituminous coal (or blends of bituminous coal) from which the volatile constituents are driven off by baking in an oven at temperatures as high as 2,000 degrees Fahrenheit, so that the fixed carbon and ash are fused together. Coke is hard and porous, has a gray, submetallic luster, and is strong enough to support a load of iron ore in a blast furnace. It is used both as a fuel and a reducing agent in smelting iron ore in a blast furnace. Coke has a heating value of 24.8 million Btu per short ton.

Coke Plants: Plants where coal is carbonized in slot or beehive ovens for the manufacture of coke.

Continuous Mining: A form of room-and-pillar mining in which a continuous mining machine extracts and removes coal from the working face in one operation; no blasting is required.

Conventional Mining: The oldest form of room-and-pillar mining which consists of a series of operations

that involve cutting the coalbed so it breaks easily when blasted with explosives or high-pressure air, and then loading the broken coal.

Cost, Insurance, Freight (CIF): A type of sale in which the buyer of the product agrees to pay a unit price that includes the F.O.B. value of the product at the point of origin plus all costs of insurance and transportation. This type of transaction differs from a "delivered" purchase in that the buyer accepts the quantity as determined at the loading port (as certified by the Bill of Lading and Quality Report) rather than pay on the basis of the quantity and quality ascertained at the unloading port. It is similar to the terms of an F.O.B. sale, except that the seller, as a service for which he is compensated, arranges for transportation and insurance.

Crude Oil: A mixture of hydrocarbons that exists in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface-separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite and oil shale. Drip gases are also included, but topped crude (residual oil) and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable. Crude oil is considered as either domestic or foreign, according to the following: or from its "outer continental shelf" as defined in 43 U.S.C. 1331. States. Imported Athabasca hydrocarbons are included.

Culm: Waste from Pennsylvania anthracite preparation plants, consisting of coarse rock fragments containing as much as 30 percent small-sized coal; sometimes defined as including very fine coal particles called silt. Its heat value ranges from 8 to 17 million Btu per short ton.

Customs District: Customs districts, as defined by the Bureau of the Census, U.S. Department of Commerce, "Monthly Report EM 545," are as follows

- **Eastern:** Bridgeport, CT, Washington, DC, Boston, MA, Baltimore, MD, Portland, ME, Buffalo, NY, New York City, NY, Ogdensburg, NY, Philadelphia, PA, Providence, RI, Norfolk, VA, St. Albans, VT.
- **Southern:** Mobile, AL, Savannah, GA, Miami, FL, Tampa, FL, New Orleans, LA, Wilmington, NC, San Juan, PR, Charleston, SC, Dallas-Fort Worth, TX, El Paso, TX, Houston-Galveston, TX, Laredo, TX, Virgin Islands.
- **Western:** Anchorage, AK, Nogales, AZ, Los Angeles, CA, San Diego, CA, San Francisco, CA, Honolulu, HI, Great Falls, MT, Portland, OR, Seattle, WA.
- **Northern:** Chicago, IL, Detroit, MI, Duluth, MN, Minneapolis, MN, St. Louis, MO, Pembina, ND, Cleveland, OH, Milwaukee, WI.

Customs Import Value: The value of imports as appraised by the U.S. Customs Service in accordance with the legal requirements of the Tariff Act of 1930, as amended. This value is generally defined as the

price actually paid or payable for merchandise when sold for exportation to the United States, excluding U.S. import duties, freight, insurance, and other charges incurred in bringing the merchandise to the United States.

Demonstrated Reserve Base: A collective term for the sum of coal in both measured and indicated resource categories of reliability which represents 100 percent of the coal in these categories in place as of a certain date. Includes beds of bituminous coal and anthracite 28 inches or more thick and beds of subbituminous coal 60 inches or more thick that occur at depths to 1 thousand feet. Includes beds of lignite 60 inches or more thick that can be surface mined. Includes also thinner and/or deeper beds that presently are being mined or for which there is evidence that they could be mined commercially at this time. Represents that portion of the identified coal resource from which reserves are calculated.

Depletion: The subtraction of both the tonnage produced and the tonnage lost to mining from identified resources to determine the remaining tonnage as of a certain time.

Depletion Factor: The multiplier applied to the tonnage produced to compute depletion. This multiplier takes into account both the tonnage recovered and the tonnage lost due to mining. The depletion factor is the reciprocal of the recovery factor in relation to a given quantity of production.

Direct Labor Hours: Direct labor hours worked by all mining employees at a mining operation during the year. Includes hours worked by those employees engaged in production, preparation, development, maintenance, repair, shop or yard work, management, and technical or engineering work. Excludes office workers. Excludes vacation and leave hours.

Distillate Fuel Oil: A general classification for one of the petroleum fractions produced in conventional distillation operations. Included are products known as No.1, No.2, and No.4 fuel oils and No.1, No.2, and No.4 diesel fuels. It is used primarily for space heating, on-and-off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and electric power generation.

Dredge Mining: A method of recovering coal from rivers or streams.

Drift Mine: An underground mine that has a horizontal entry dug to a coalbed in a hillside.

Dry (Coal) Basis: Coal quality data calculated to a theoretical basis in which no moisture is associated with the sample. This basis is determined by measuring the weight loss of a sample when its inherent moisture is driven off under controlled conditions of low temperature air-drying followed by heating to just above the boiling point of water (104 to 110 degrees centigrade).

Electricity: A form of energy generated by friction, induction, or chemical change that is caused by the

presence and motion of elementary charged particles of which matter consists.

Electricity Generation: The process of producing electric energy or transforming other forms of energy into electric energy. Also the amount of electric energy produced or expressed in wathours (Wh).

Electricity Generation, Gross: The total amount of electric energy produced by the generating station or stations, measured at the generator terminals.

Electricity Generation, Net: Gross generation less electricity consumed at the generating plant for station use. Electricity required for pumping at pumped-storage plants is regarded as plant use and is deducted from gross generation.

Electric Power Plant: A station containing prime movers, electric generators, and auxiliary equipment for converting mechanical, chemical, and/or fission energy into electric energy.

Electric Utility: A corporation, person, agency, authority, or other legal entity or instrumentality that owns and/or operates facilities within the United States, its territories, or Puerto Rico for the generation, transmission, distribution, or sale of electric energy primarily for use by the public and files forms listed in the Code of Federal Regulations, Title 18, Part 141. Facilities that qualify as cogenerators or small power producers under the Public Utility Regulatory Policies Act (PURPA) and exempt wholesale generators under Energy Policy Act of 1992 are not considered electric utilities. See definition of non-utility power producer.

Electric Utility Sector: The electric utility sector consists of privately and publicly owned establishments that generate, transmit, distribute, or sell electricity primarily for use by the public and that meet the definition of an electric utility. Nonutility power producers are not included in the electric utility sector.

Emissions: The pollutants discharged into the atmosphere in exhaust gases. For coal-burning plants, these emissions are primarily Carbon Dioxide (CO_2), Nitrogen Oxide (NO_x), and Sulfur Dioxide (SO_2).

Energy: The capacity for doing work as measured by the capability of doing work (potential energy) or the conversion of this capability to motion (kinetic energy). Energy has several forms, some of which are easily convertible and can be changed to another form useful for work. Most of the world's convertible energy comes from fossil fuels that are burned to produce heat that is then used as a transfer medium to mechanical or other means in order to accomplish tasks. Electrical energy is usually measured in kilowatt hours, while heat energy is usually measured in British thermal units.

Energy Consumption: The use of energy as a source of heat or power or as an input in the manufacturing process.

Exports: Shipments of goods from the 50 States and the District of Columbia to foreign countries, Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

Fahrenheit: A temperature scale on which the boiling point of water is at 212 degrees above zero on the scale and the freezing point is at 32 degrees above zero at standard atmospheric pressure.

F.A.S. Value: Free alongside ship value. The value of a commodity at the port of exportation, generally including the purchase price plus all charges incurred in placing the commodity alongside the carrier at the port of exportation in the country of exportation.

Federal Energy Regulatory Commission (FERC): A quasi-independent regulatory agency within the Department of Energy having jurisdiction over interstate electricity sales, wholesale electric rates, hydroelectric licensing, natural gas pricing, oil pipeline rates, and gas pipeline certification.

Federal Coal Lease: A lease granted to a mining company to produce coal from land owned and administered by the Federal Government in exchange for royalties and other revenues.

Federal Power Act: Enacted in 1920, and amended in 1935, the Act consists of three parts. The first part incorporated the Federal Water Power Act administered by the former Federal Power Commission, whose activities were confined almost entirely to licensing non-Federal hydroelectric projects. Parts II and III were added with the passage of the Public Utility Act. These parts extended the Act's jurisdiction to include regulating the interstate transmission of electrical energy and rates for its sale as wholesale in interstate commerce. The Federal Energy Regulatory Commission is now charged with the administration of this law.

Federal Power Commission: The predecessor agency of the Federal Energy Regulatory Commission. The Federal Power Commission (FPC) was created by an Act of Congress under the Federal Water Power Act on June 10, 1920. It was charged originally with regulating the electric power and natural gas industries. The FPC was abolished on September 20, 1977, when the Department of Energy was created. The functions of the FPC were divided between the Department of Energy and the Federal Energy Regulatory Commission.

FERC: The Federal Energy Regulatory Commission.

Fixed Carbon: The nonvolatile matter in coal minus the ash. Fixed carbon is the solid residue other than ash obtained by prescribed methods of destructive distillation of a coal. Fixed carbon is the part of the total carbon that remains when coal is heated in a closed vessel until all volatile matter is driven off.

Flue Gas Desulfurization Unit (Scrubber): Equipment used to remove sulfur oxides from the combustion gases of a boiler plant before discharge to the

atmosphere. Chemicals, such as lime, are used as the scrubbing media.

Flue Gas Particulate Collectors: Equipment used to remove fly ash from the combustion gases of a boiler plant before discharge to the atmosphere. Particulate collectors include electrostatic precipitators, mechanical collectors (cyclones), fabric filters (baghouses), and wet scrubbers.

F.O.B. Mine Price: The free on board mine price. This is the price paid for coal at the mining operation site. It excludes freight or shipping and insurance costs.

F.O.B. Rail/Barge Price: The free on board price of coal at the point of first sale. It excludes freight or shipping and insurance costs.

Foreign-Controlled Firms: Foreign-controlled firms are U.S. coal producers with more than 50 percent of their stock or assets owned by a foreign firm.

Fossil-Fuel Electric Generation: Electric generation in which the prime mover is a turbine rotated by high-pressure steam produced in a boiler by heat from burning fossil fuels.

Geothermal Energy: Energy from the internal heat of the earth, which may be residual heat, friction heat, or a result of radioactive decay. The heat is found in rocks and fluids at various depths and can be extracted by drilling and/or pumping.

Greenhouse Effect: The increasing mean global surface temperature of the earth caused by gases in the atmosphere (including carbon dioxide, methane, nitrous oxide, ozone, and chlorofluorocarbon). The greenhouse effect allows solar radiation to penetrate but absorbs the infrared radiation returning to space.

Gross Domestic Product (GDP): The total value of goods and services produced by labor and property in the United States. As long as the labor and property are located in the United States, the supplier (that is, the workers and, for property, the owners) may be either U.S. residents or residents of foreign countries.

Hand Loading: An underground loading method by which coal is removed from the working face by manual labor through the use of a shovel for conveyance to the surface. Though rapidly disappearing, it is still used in very small-tonnage mines.

Highwall: the unexcavated face of exposed overburden and coal in a surface mine.

High-Volatile A Bituminous Coal: See Bituminous coal.

High-Volatile B Bituminous Coal: See Bituminous coal.

High-Volatile C Bituminous Coal: See Bituminous coal.

High-Volatile (specific sub-group unknown): See Bituminous coal.

Hydroelectric Power: The harnessing of flowing water to produce mechanical or electrical energy.

Implicit Price Deflator: The implicit price deflator, published by the U.S. Department of Commerce, Bureau of Economic Analysis, is used to convert nominal figures to real figures.

Imports: Receipts of goods into the 50 States and the District of Columbia from foreign countries and from Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

Indian Coal Lease: A lease granted to a mining company to produce coal from Indian lands in exchange for royalties and other revenues; obtained by direct negotiation with the Indians, but subject to approval and administration by the U.S. Department of the Interior.

Industrial Sector: The industrial sector comprises manufacturing industries which make up the largest part of the sector, along with mining, construction, agriculture, fisheries, and forestry. Establishments in the sector range from steel mills, to small farms, to companies assembling electronic components. The NAICS codes used to classify establishments as industrial are 331 through 339.

Interquartile Range: The interquartile range is the range within which the middle 50 percent of observations are concentrated. See Appendix D, Section "Interquartile Range."

Jet Fuel: The term includes kerosene-type jet fuel and naphtha-type jet fuel. Kerosene-type jet fuel is a kerosene-quality product used primarily for commercial turbojet and turboprop aircraft engines. Naphtha-type jet fuel is a fuel in the heavy naphtha range used primarily for military turbojet and turboprop aircraft engines.

Lease Condensate: A natural gas liquid recovered from gas well gas (associated and non-associated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentane and heavier hydrocarbons.

Lignite: A brownish-black coal of low rank with high inherent moisture and volatile matter (used almost exclusively for electric power generation). Similar coal in Europe and Australia are also referred to as brown coal. Lignite comprises two groups classified according to the following ASTM Specification D-388-91a for calorific values on a moist mineral-matter-free basis:

	Limits Btu/lb.	
	GE	LT
Lignite A	6300	8300
Lignite B	-	6300

GE = Greater than or equal to
LT = Less than
Lignite is non-agglomerating.

Lignite A: See Lignite.

Lignite B: See Lignite.

Longwall Mining: A form of underground coal mining which is gaining in importance in the United States and can be used at greater depths than room-and-pillar mining. In longwall mining, a cutting machine is pulled back and forth across a panel of coal 300 to 600 feet wide and as much as a mile long, with the broken coal moved by conveyor. Longwall mining is done under movable roof supports that are advanced as the bed is cut. The roof in the mined-out area is allowed to fall as the mining advances.

Low-Volatile Bituminous Coal: See Bituminous Coal.

Major Coal-Producing States: Any State that produces more than 12 million short tons of coal during the year.

Manufacturing (except coke plants): Those industrial users/plants, not including coke plants, that are engaged in the mechanical or chemical transformation of materials or substances into new (i.e., finished or semifinished) products. Includes coal used for gasification/liquefaction.

Medium-Volatile Bituminous Coal: See Bituminous Coal.

Merchant Coke Plant: A coke plant where coke is produced primarily for sale on the commercial (open) market.

Meta-Anthracite: See Anthracite.

Metallurgical Coal: Coal that meets the requirements for making coke. It must be low in ash and sulfur and form a coke that is capable of supporting the charge of iron ore and limestone in a blast furnace. A blend of two or more bituminous coals is usually required to make coke.

Metric Ton: A unit of weight equal to 2,204.6 pounds.

Mine Type: See Surface Mine and Underground Mine.

Mineral-Matter-Free Basis: Mineral matter in coal is the parent material in coal from which ash is derived, and which comes from minerals present in the original plant materials that formed the coal, or from extraneous sources such as sediments and precipitates from mineralized water is called the mineral matter. Mineral matter in coal cannot be analytically determined and is commonly calculated using data on ash and ash-forming constituents. Coal analyses are calculated to the mineral-matter-free basis by adjusting formulas used in calculations in order to deduct the weight of mineral matter from the total coal.

Moist (Coal) Basis: "Moist" coal contains its natural inherent or bed moisture, but does not include water adhering to the surface. Coal analyses expressed on a moist basis are performed or adjusted so as to describe the data when the coal contains only that moisture which exists in the bed in its natural state of deposition, and when the coal has not lost any moisture due to drying.

NAICS: See North American Industry Classification System

Naphtha: A genetic term applied to a petroleum fraction with an approximate boiling range between 122 and 400 degrees Fahrenheit.

Natural Gas: A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

Natural Gas (Dry): The marketable portion of natural gas production, which is obtained by subtracting extraction losses, including natural gas liquids removed at natural gas processing plants, from total production.

Natural Gas Plant Liquids (NGPL): Natural gas liquids recovered from natural gas in processing plants and, in some situations, from natural gas field facilities, as well as those extracted by fractionators. Natural gas plant liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Materials as follows: ethane, propane, normal butane, isobutane, pentane plus, and other products from natural gas processing plants (i.e., products meeting the standards for finished petroleum products produced at natural gas processing plants, such as finished motor gasoline, finished aviation gasoline, special naphtha, kerosene, distillate fuel oil, and miscellaneous products).

Nitrogen Oxide: NO_x . A gas formed in high-temperature environments when nitrogen and oxygen are present together. This typically occurs in a combustion chamber such as those in fossil-fuel burning electric utilities. Nitrogen oxide emissions are a contributor to acid rain.

Nominal Price: The price paid for a product or service at the time of the transaction. The nominal price, which is expressed in current dollars, is not adjusted to remove the effect of changes in the purchasing power of the dollar.

Nonutility Power Producers: A corporation, person, agency, authority, or other legal entity or instrumentality that owns electric generating capacity and is not an electric utility. Nonutility power producers include qualifying cogenerators, qualifying small-power producers, and other nonutility generators (including independent power producers) without a designated franchised service area and which do not file forms listed in the Code of Federal Regulations, Title 18, Part 141. (See Electric Utility.)

North American Industry Classification System (NAICS): A standardized set of codes which categorizes industries into groups with similar economic activities, used by the U.S., Canada, and Mexico. The NAICS codes replace the SIC codes.

Nuclear Electric Power: Electricity generated by an electric power plant whose turbines are driven by steam generated in a reactor by heat from the fissioning of nuclear fuel.

Number of Mines: The number of mines, or mines collocated with preparation plants or tipplés, located in a particular geographic area (State or region). If a mine is mining coal across two counties within a State, or across two States, then it is counted as two operations. This is done so that EIA can separate production by State and county.

Number of Mining Operations: The number of mining operations includes preparation plants with greater than 5,000 total direct labor hours. Mining operations that consist of a mine and preparation plant or a preparation plant only will be counted as two operations, if the preparation plant processes both underground and surface coal. Excluded are silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons of coal during the year, and preparation plants with less than 5,000 employee hours.

Open Market Coal: Coal sold in the open market, i.e., coal sold to companies other than the reporting company's parent company or an operating subsidiary of the parent company.

Operating Subsidiary: A company which is controlled through the ownership of voting stock, or a corporate joint venture in which a corporation is owned by a small group of businesses as a separate and specific business or project for the mutual benefit of the members of the group.

Other Industrial Plant: Industrial users, not including coke plants, engaged in the mechanical or chemical transformation of materials or substances into new products (manufacturing); and companies engaged in the agriculture, mining, or construction industries.

Other Power Producers: This sector is comprised of coal-burning facilities that generate power but are not covered by the EIA survey form EIA-759.

Other Unions: See Union Type.

Overburden: Any material, consolidated or unconsolidated, that overlies a coal deposit.

Parent Company: A company which solely or jointly owns the reporting company and which is not itself a subsidiary of, or owned by, another company.

Percent Utilization: The ratio of total production to productive capacity, times 100.

Petroleum: Petroleum includes residential and distillate fuel oils, crude oil, and all other petroleum fuels, excluding petroleum coke.

Petroleum Coke: A residue that is the final product of the condensation process in cracking. The product is either marketable petroleum coke or catalyst petroleum coke.

Petroleum Products: Products obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentane plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphtha, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Photovoltaic and Solar Thermal Energy (as used at electric utilities): Energy radiated by the sun as electromagnetic waves (electromagnetic radiation) that is converted at electric utilities into electricity by means of solar (photovoltaic) cells or concentrating (focusing) collectors.

Preparation Plant: A mining facility at which coal is crushed, screened, and mechanically cleaned.

Producer and Distributor Coal Stocks: Producer and distributor coal stocks consist of coal held in stock by producers/distributors at the end of a reporting period.

Productive Capacity: The maximum amount of coal that a mining operation can produce or process during a period with the existing mining equipment and/or preparation plant in place, assuming that the labor and materials sufficient to utilize the plant and equipment are available, and that the market exists for the maximum production.

Quadrillion Btu: 10^{15} Btu.

Real Price: A price that has been adjusted to remove the effect of changes in the purchasing power of the dollar. Real prices, which are expressed in constant dollars, usually reflect buying power relative to a base year.

Recoverable Coal Reserves at Mines: The quantity of coal that can be recovered (i.e., mined) from existing coal reserves, as reported on Form EIA-7A.

Recoverable Reserves of Coal: An estimate of the amount of coal that can be recovered (mined) from the accessible reserves of the demonstrated reserve base.

Recovery Percentage: The percentage of coal that can be recovered from the coal deposits at existing mines.

Refuse Bank: A repository for waste material generated by the coal cleaning process.

Refuse Mine: A surface mine where coal is recovered from previously mined coal. It may also be known as a silt bank, culm bank, refuse bank, slurry dam, or dredge operation.

Report Year: The calendar year beginning at 12:00 a.m. January 1 and ending at 11:59 p.m. December 31.

Residential and Commercial Sector: Housing units; wholesale and retail businesses (except coal wholesale dealers); health institutions (hospitals); social and educational institutions (schools and universities); and Federal, State, and local governments (military installations, prisons, office buildings).

Residual Fuel Oil: The heavier oils that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations and that conform to ASTM Specifications D396 and 975. Included are No. 5, a residual fuel oil of medium viscosity; Navy Special, for use in steam-powered vessels in government service and in shore power plants; and No. 6, which includes Bunker C fuel oil and is used for commercial and industrial heating, electricity generation, and to power ships. Imports of residual fuel oil include imported crude oil burned as fuel.

Room-and-Pillar Mining: The most common method of underground mining in which the mine roof is supported mainly by coal pillars left at regular intervals. Rooms are places where the coal is mined; pillars are areas of coal left between the rooms. Room-and-pillar mining is done either by conventional or continuous mining.

Royalties: Payments, in money or kind, of a stated share of production from mineral deposits, by the lessee to the lessor. Royalties may be an established minimum, a sliding-scale, or a step-scale. A step-scale royalty rate increases by steps as the average production on the lease increases. A sliding-scale royalty rate is based on average production and applies to all production from the lease.

Sales Volume: The reported output from Federal and/or Indian lands, the basis of royalties. It is approximately equivalent to production, which includes coal sold, and coal added to stockpiles.

Scoop Loading: An underground loading method by which coal is removed from the working face by a tractor unit equipped with a hydraulically operated bucket attached to the front; also called a front-end loader.

Semianthracite: See Anthracite.

Shaft Mine: An underground mine that reaches the coalbed by means of a vertical shaft. In addition to the passages providing entry to the coalbed, a network of

other passages are also dug, some to provide access to various parts of the mine and some for ventilation.

Short Ton: A unit of weight equal to 2,000 pounds.

Shortwall Mining: A form of underground mining that involves the use of a continuous mining machine and movable roof supports to shear coal panels 150 to 200 feet wide and more than half a mile long. Although similar to longwall mining, shortwall mining is generally more flexible because of the smaller working area. Productivity is lower than with longwall mining because the coal is hauled to the mine face by shuttle cars as opposed to conveyors.

SIC: See Standard Industrial Classification.

Silt: Waste from Pennsylvania anthracite preparation plants, consisting of coarse rock fragments containing as much as 30 percent small-sized coal; sometimes defined as including very fine coal particles called silt. Its heat value ranges from 8 to 17 million Btu per short ton. Synonymous with culm.

Silt, Culm Refuse Bank, or Slurry Dam Mining: A mining operation producing coal from these sources of coal. (See refuse mine.)

Slope Mine: An underground mine in which the entry is driven at an angle to reach the coal deposit.

Slurry Dam: A repository for the silt or culm from a preparation plant.

Solar Energy: The radiant energy of the sun, which can be converted into other forms of energy, such as heat or electricity.

Solar Thermal Collector: A device designed to receive solar radiation and convert it into thermal energy. Normally, a solar thermal collector includes a frame, glazing, and an absorber, together with appropriate insulation. The heat collected by the solar thermal collector may be used immediately or stored for later use.

Standard Industrial Classification (SIC): A set of codes developed by the Office of Management and Budget which categorizes industries to groups with similar economic activities. The SIC codes have been replaced by the North American Industry Classification System (NAICS).

Steam Coal: All noncoking coal.

Stocks: The supply of coal or coke at a mine, plant, or utility at the end of the reporting period.

Strategic Petroleum Reserve (SPR): Petroleum stocks maintained by the Federal Government for use during periods of major supply interruption.

Strip (Surface) Mining: A method used on flat terrain to recover coal by mining long strips successively. The material excavated from the strip being mined is deposited in the strip previously mined.

Subbituminous Coal: A dull black coal of rank intermediate between lignite and bituminous, consisting of subbituminous A coal, subbituminous B coal, and subbituminous C coal, classified according to the following ASTM Specification D-388-91a on a moist mineral-matter-free basis:

	Calorific Value Limits Btu/lb.	
	GE	LT
Subbituminous A Coal	10500	11500
Subbituminous B Coal	9500	10500
Subbituminous C Coal	8300	9500

GE = Greater than or equal to

LT = Less than

Subbituminous coal is non-agglomerating.

Subbituminous A Coal: See Subbituminous Coal.

Subbituminous B Coal: See Subbituminous Coal.

Subbituminous C Coal: See Subbituminous Coal.

Sulfur: One of the elements present in varying quantities in coal that contributes to environmental degradation when coal is burned. In terms of sulfur content by weight, coal is generally classified as low (less than or equal to 1 percent), medium (greater than 1 percent and less than or equal to 3 percent), and high (greater than 3 percent). Sulfur content is measured as a percent by weight of coal on an "as received" or a "dry" (moisture-free, usually part of a laboratory analysis) basis.

Sulfur Dioxide: SO_2 . A caustic, corrosive gas that is a by-product of combustion and emissions from fossil-fuel burning electric utility plants. The primary agent in the production of acid rain.

Supplemental Gaseous Fuels: Any gaseous substance that, introduced into or commingled with natural gas, increases the volume available for disposition. Such substances include, but are not limited to, propane-air, refinery gas, coke oven gas, still gas, manufactured gas, biomass gas, or air or inert gases added for Btu stabilization.

Surface Mine: A coal-producing mine that is usually within a few hundred feet of the surface. Earth and rock above or around the coal (overburden) is removed to expose the coalbed, which is then mined with surface excavation equipment such as draglines, power shovels, bulldozers, loaders, and augers. It may also be known as an area, contour, open-pit, strip, or auger mine.

Tipple: A central facility used in loading coal for transportation by rail or truck.

Transportation Sector: The transportation sector consists of private and public vehicles that move people and commodities. Included are automobiles, trucks, buses, motorcycles, railroads and railways (including streetcars), aircraft, ships, barges, and natural gas pipelines.

Underground Mine: A mine where coal is produced by tunneling into the earth to the coalbed, which is then mined with underground mining equipment such as cutting machines and continuous, longwall, and shortwall mining machines. Underground mines are classified according to the type of opening used to reach the coal, i.e., drift (level tunnel), slope (inclined tunnel), or shaft (vertical tunnel).

Unfinished Oils: All oils requiring further refinery processing, except those requiring only mechanical blending. Includes naphtha and lighter oils, kerosene and light gas oils, heavy gas oils, and residuum.

Union Type: Union type consists of United Mine Workers of America (UMWA), and the following "Other Union" types: Southern Labor Union (SLU), Appalachian Miners of America (AMA), Scotia Employees Association (SEA), International Union of Operating Engineers (IUOE), Utility Workers of America (UWA), Progressive Mine Workers Association (PMWA), International Brotherhood of Electrical Workers (IBEW), International Chemical Workers Union (ICWU), Redstone Workers Association (RWA), Chariton Valley Independent Union (CVIU), American Federation of Labor - Congress of Industrial Organization (AFL-CIO), Labors International (LABO), Crow Hollow Miners (CROW), Coal Strippers (COAL), United Steel Workers (USW), Independent Miners Association (IMA), Independent Union (INUN), Independence Miners, Brokers, and Truckers Association (IMBT), Council of Southern Mountains (CSM), International Brotherhood of Teamsters, Chauffeurs, Warehousemen and Helpers Union (TEAM), Thompson Creek Workers Association (TCWA), United Brotherhood of Clay Workers (UBCW), Wilmot Employees Independent Union (WEIU), Independent Strip Miners Union (ISMU), Independent Miners (IM), Independent Workers (IW), Coal Strippers Union (CSU), Independent Miners Union (IMU), Independent Coal Workers (ICW),

Independent Strip Mining Workers (ISMW), Independent Strip Union (ISU), Association of Bituminous Contractors (ABC), Arch Minerals Employees Association (AMEA), United Paperworkers International Union (UPIU), Welch Miners Union (WMU), Falcon Coal Employees Association (FCEA), Justus Employees Association (JEA), International Construction Union (ICU), Brotherhood of Miners (BOM), Western Energy Workers (WEW), Carlin Independent Union (CIU), International Association of United Workers Union (IAWU), and Stove, Furnace and Allied Appliance Workers International Union of N. A. (SFAW).

U.S. Coal Exports: Amount of U.S. coal shipped to foreign destinations, as reported in the U.S. Department of Commerce, Bureau of Census, "Monthly Report EM 545."

U.S. Coal Imports: Amount of foreign coal shipped to the United States, as reported in the U.S. Department of Commerce, Bureau of the Census, "Monthly Report IM 145."

Wind Energy (as used at electric utilities): The kinetic energy of wind converted at electric utilities into mechanical energy by wind turbines (i.e., blades rotating from the hub) that drive generators to produce electricity for distribution.

Wood and Waste (as used at electric utilities): Wood energy, garbage, bagasse, sewerage gas, and other industrial, agricultural, and urban refuse used to generate electricity for distribution.

Volatile Matter: Those products, exclusive of moisture, given off by a material as gas or vapor. Volatile matter is determined by heating the coal to 950 degrees centigrade under carefully controlled conditions and measuring the weight loss, excluding weight of moisture driven off at 105 degrees Centigrade.